

# Samuel Raetz

## List of Publications by Year in descending order

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29  
papers

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citations

759055

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839398

18  
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all docs

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docs citations

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times ranked

336  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Investigation of interfacial stiffnesses of a tri-layer using Zero-Group Velocity Lamb modes. Journal of the Acoustical Society of America, 2015, 138, 3202-3209.  | 0.5 | 43        |
| 2  | High-Frequency Elastic Coupling at the Interface of van der Waals Nanolayers Imaged by Picosecond Ultrasonics. ACS Nano, 2019, 13, 11530-11537.  | 7.3 | 24        |
| 3  | Imaging grain microstructure in a model ceramic energy material with optically generated coherent acoustic phonons. Nature Communications, 2020, 11, 1597.   | 5.8 | 24        |
| 4  | Spatial Laplace transform for complex wavenumber recovery and its application to the analysis of attenuation in acoustic systems. Journal of Applied Physics, 2016, 120, .                                     | 1.1 | 23        |
| 5  | Longitudinal sound velocities, elastic anisotropy, and phase transition of high-pressure cubic $H_2O$ ice to 82 GPa. Physical Review B, 2017, 96,  | 1.1 | 22        |
| 6  | Characterization of Progressive Fatigue Damage in Solid Plates by Laser Ultrasonic Monitoring of Zero-Group-Velocity Lamb Modes. Physical Review Applied, 2018, 9, .   | 1.5 | 21        |
| 7  | Picosecond laser ultrasonics for imaging of transparent polycrystalline materials compressed to megabar pressures. Ultrasonics, 2016, 69, 259-267.   | 2.1 | 19        |
| 8  | Beam shaping to enhance zero group velocity Lamb mode generation in a composite plate and nondestructive testing application. NDT and E International, 2017, 85, 13-19.  | 1.7 | 16        |
| 9  | Nondestructive characterization of polycrystalline 3D microstructure with time-domain Brillouin scattering. Scripta Materialia, 2019, 166, 34-38.  | 2.6 | 16        |
| 10 | Cumulative fatigue damage in thin aluminum films evaluated non-destructively with lasers via zero-group-velocity Lamb modes. NDT and E International, 2020, 116, 102323.                                       | 1.7 | 13        |
| 11 | Nondestructive evaluation of structural adhesive bonding using the attenuation of zero-group-velocity Lamb modes. Applied Physics Letters, 2020, 116, .  | 1.5 | 13        |
| 12 | Photoacoustic 3-D imaging of polycrystalline microstructure improved with transverse acoustic waves. Photoacoustics, 2021, 23, 100286.   | 4.4 | 13        |
| 13 | Effect of refracted light distribution on the photoelastic generation of zero-group velocity Lamb modes in optically low-absorbing plates. Journal of the Acoustical Society of America, 2015, 138, 3522-3530. | 0.5 | 11        |
| 14 | Effect of laser beam incidence angle on the thermoelastic generation in semi-transparent materials. Journal of the Acoustical Society of America, 2011, 130, 3691-3697.  | 0.5 | 10        |
| 15 | Elastic anisotropy and single-crystal moduli of solid argon up to 64 GPa from time-domain Brillouin scattering. Physical Review B, 2019, 99, .   | 1.1 | 10        |
| 16 | Ultrafast light-induced shear strain probed by time-resolved x-ray diffraction: Multiferroic $BiFeO_3$ as a case study. Physical Review B, 2020, 102, .  | 1.1 | 9         |
| 17 | Nonlinear generation of a zero group velocity mode in an elastic plate by non-collinear mixing. Ultrasonics, 2022, 119, 106589.  | 2.1 | 8         |
| 18 | Acoustic beam steering by light refraction: Illustration with directivity patterns of a tilted volume photoacoustic source. Journal of the Acoustical Society of America, 2013, 134, 4381-4392.                | 0.5 | 7         |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | <i>In situ</i> imaging of the dynamics of photo-induced structural phase transition at high pressures by picosecond acoustic interferometry. <i>New Journal of Physics</i> , 2017, 19, 053026.  | 1.2 | 7         |
| 20 | 3D characterization of individual grains of coexisting high-pressure H2O ice phases by time-domain Brillouin scattering. <i>Journal of Applied Physics</i> , 2021, 130, .   | 1.1 | 7         |
| 21 | Laser ultrasonics in a multilayer structure: Plane wave synthesis and inverse problem for nondestructive evaluation of adhesive bondings. <i>Journal of the Acoustical Society of America</i> , 2021, 150, 2076-2087.   | 0.5 | 6         |
| 22 | Evaluation of Optical and Acoustical Properties of Ba <sub>1-x</sub> Sr <sub>x</sub> TiO <sub>3</sub> Thin Film Material Library via Conjugation of Picosecond Laser Ultrasonics with X-ray Diffraction, Energy Dispersive Spectroscopy, Electron Probe Micro Analysis, Scanning Electron and Atomic Force Microscopies. <i>Nanomaterials</i> , 2021, 11, 3131. | 1.9 | 4         |
| 23 | Evaluation of the Structural Phase Transition in Multiferroic (Bi <sub>1-x</sub> Pr <sub>x</sub> )(Fe <sub>0.95</sub> Mn <sub>0.05</sub> )O <sub>3</sub> Thin Films by A Multi-Technique Approach Including Picosecond Laser Ultrasonics. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 736.   | 1.3 | 3         |
| 24 | Laser ultrasonics in a multilayer structure: Semi-analytic model and simulated examples. <i>Journal of the Acoustical Society of America</i> , 2021, 150, 2065-2075.  | 0.5 | 3         |
| 25 | In-Situ Imaging of a Light-Induced Modification Process in Organo-Silica Films via Time-Domain Brillouin Scattering. <i>Nanomaterials</i> , 2022, 12, 1600.   | 1.9 | 3         |
| 26 | Growing phenotype-controlled phononic materials from plant cells scaffolds. <i>Applied Materials Today</i> , 2021, 22, 100934.  | 2.3 | 2         |
| 27 | Estimation via Laser Ultrasonics of the Ultrasonic Attenuation in a Polycrystalline Aluminum Thin Plate Using Complex Wavenumber Recovery in the Vicinity of a Zero-Group-Velocity Lamb Mode. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 6924.   | 1.3 | 2         |
| 28 | Oblique laser incidence to select laser-generated acoustic modes. <i>Journal of Physics: Conference Series</i> , 2011, 278, 012030.   | 0.3 | 0         |
| 29 | Nonthermal Transport of Energy Driven by Photoexcited Carriers in Switchable Solid States of GeTe. <i>Physical Review Applied</i> , 2021, 16, .   | 1.5 | 0         |