

1976 Index

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This index covers all items - papers, correspondence, reviews, etc. - that appeared in this periodical during 1976, and items from prior years that were commented upon or corrected in 1976. The index is divided into an Author Index and a Subject Index, both arranged alphabetically.

The *Author Index* contains the primary entry for each item: this entry is listed under the name of the first author and includes coauthor names, title, location of the item, and notice of corrections and comments if any. Cross-references are used from each coauthor name to the name of the corresponding first author. The location of the item is specified by the journal name (abbreviated), year, month, inclusive pages, and microfiche code. [The microfiche code, given in parentheses following the inclusive pages, consists of four characters to be interpreted as follows: the first character identifies the microfiche number within the set of fiches for the issue; the second character identifies the row in which the first frame of the particular item is located; and the last two characters designate the position of that frame within the row.]

The *Subject Index* contains several entries for each item, each consisting of a subject heading, modifying phrase(s), first author's name, and location of the item. For information on coauthors, title, comments and corrections if any, etc., it is necessary to refer to the Author Index. Some generic subject headings are used in this index in addition to the usual technical headings, e.g., *Books*, (books reviewed in this periodical), *Bibliographies* (both papers that are bibliographies and any other papers which contain more than 50 references), *Conferences* (technical meetings a substantial number of whose abstracts or papers have appeared in this periodical), and *Special Issues* (issues of this periodical devoted primarily to a specific subject). The Subject Index includes subject cross-references as required by the subject matter.

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- Acoustic propagation, nonlinear media; cf.** Acoustic bulk-wave propagation, nonlinear media; Acoustic surface-wave propagation, nonlinear media
- Acoustic pulse compression; cf.** Acoustic surface-wave pulse compression
- Acoustic radiation effects; cf.** Biomedical acoustics
- Acoustic reflection**
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- Acoustic reflection; cf.** Acoustic surface-wave reflection
- Acoustic resonators**
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- CdS; mechanisms of optical modulation due to acoustic domains. *Hata, Tomonobu, T-SU 76 May 202 (1E10)*
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Thin-film devices
 acoustic surface-wave propagation in ZnO thin films; strain effects. *Nalamwar, A. L., T-SU 76 May 144-147 (1A08)*
 AlN-on-sapphire for acoustic surface-wave devices. *Liu, J. K., T-SU 76 May 215 (1F09)*
Thin-film devices; cf. Silicon-on-insulator devices
Thin-film transducers
 acoustic bulk-wave transducers; ZnO thin-film interdigital transducer. *Nalamwar, A. L., T-SU 76 May 190 (1D12)*

Thin-film waveguides; cf. Acoustic surface-wave waveguides; Optical planar waveguides

Time-sharing computer systems
nondestructive evaluation applications. *White, Richard M., T-SU 76 Sep 306-312 (1B12)*

Tissues; cf. Biological tissues

Titanium alloys/compounds; cf. Superconducting materials

Transducers; cf. Acoustic transducers; Biomedical transducers; Mechanical variables transducers; Optical transducers; Piezoelectric transducers; Thin-film transducers

Transforms; cf. Fourier transforms; Z transforms

Transistors; cf. MOSFETs

Transversal filters
acoustic surface-wave filters; use in discrete Fourier transform calculation. *Aisup, James M., T-SU 76 May 196 (1E04)*

Traveling-wave devices
acoustic surface-wave transducers. *Guntun, D. J., T-SU 76 May 209 (1F03)*

TV receiver circuits
ghost-image cancelling system using acoustic surface-wave tapped delay line. *Kino, Y., T-SU 76 May 193 (1E01)*

Two-port networks
acoustic surface-wave resonators; two-port resonator equivalent circuit. *Shreve, W. R., T-SU 76 May 199-200 (1E07)*

U

UHF
abbr. of Ultra-high frequency

UHF devices
acoustic surface-wave transducers; fabrication of devices operating at frequencies higher than 1.3 GHz. *Janus, A. R., T-SU 76 May 190 (1D12)*
acoustic surface-wave filters; flat exponential filters. *Slobodnik, A. J., Jr., T-SU 76 May 191-192 (1D13)*
acoustic surface-wave resonators; field distributions in planar resonators. *Mason, I. M., T-SU 76 May 199 (1E07)*

UHF filters
acoustic surface-wave filters; optically processed 825-MHz transducers. *Moore, Robert A., T-SU 76 May 190-191 (1D12)*
acoustic surface-wave filters; multipole ladder and lattice networks using surface-wave resonators. *Bell, D. T., Jr., T-SU 76 May 203-204 (1E11)*

UHF oscillators
acoustic surface-wave oscillators; use in low FM noise X-band exciter. *Burnsweig, J., T-SU 76 May 194 (1E02)*

Ultra-high frequency; cf. UHF

Ultrasonic; cf. Acoustic

Ultrasonics Symposium, Los Angeles, CA, 1975
abstracts of papers. *T-SU 76 May 187-221 (1D09)*

Underwater acoustics
object detection and classification. *Nelkin, Arthur, T-SU 76 May 198 (1E06)*

Underwater acoustic communication
data transmission systems using amplitude-shift-keying techniques. *Andrews, Robert S., T-SU 76 Jan 64-71 (1E10)*

Underwater acoustic measurements
phase and amplitude of ultrasonic beam in water; computer-controlled measurement. *Fedotowky, A., T-SU 76 May 211 (1F05)*

Underwater acoustic transducers
directional transducers using standing waves. *Sunthakar, Y., T-SU 76 May 211 (1F05)*
fields; computer-controlled measurement of phase and amplitude. *Fedotowky, A., T-SU 76 May 211 (1F05)*

Underwater object detection
underwater acoustics. *Nelkin, Arthur, T-SU 76 May 198 (1E06)*

V

VHF
abbr. of Very-high frequency

VHF devices
acoustic surface-wave filters; contiguous filter bank using constant- k sections cascaded to form quasi-transmission line. *Webb, Denis C., T-SU 76 May 191 (1D13)*
acoustic surface-wave filters; LiNbO₃ high- Q filter for operation at 116.5 MHz. *Ristic, V. M., T-SU 76 May 191 (1D13)*

VHF filters
acoustic surface-wave filters; multipole ladder and lattice networks using surface-wave resonators. *Bell, D. T., Jr., T-SU 76 May 203-204 (1E11)*

Visual system, eyes
tissue examination using ultrasonic backscatter power spectra measurements. *Lizzi, Frederic L., T-SU 76 May 189 (1D11)*

Visual system, prostheses/orthoses
directional ultrasonic transducers as sensing devices for the blind. *Sunthakar, Y., T-SU 76 May 211 (1F05)*

W

Wave diffraction; cf. Diffraction

Waveform generators
chirp transformation; waveform generation using acoustic surface-wave chirp filters. *Atzeni, C., T-SU 76 May 196 (1E04)*

Waveguides; cf. Acoustic waveguides; Optical waveguides; Semiconductor waveguides

Wave propagation; cf. Propagation

Wave scattering; cf. Scattering

Y

YIG
magnetoelastic surface-wave propagation on substrate magnetized tangentially in [110] or [111] direction. *Shen, S., T-SU 76 May 219 (1F13)*

YIG devices
magnetoelastic Rayleigh-wave delay lines and convolvers using ZnO transducers. *Parekh, J. P., T-SU 76 May 218 (1F12)*

Yttrium; cf. Rare earths

Yttrium iron garnet; cf. YIG

Z

Zinc alloys/compounds, devices
acoustic surface-wave filters; integrated programmable matched filter using ZnO film transducer. *Hickernell, Fred, T-SU 76 May 193 (1E01)*
acoustic surface-wave convolvers; ZnO/Si convolver for optical imaging and memory. *Elliott, J. K., T-SU 76 May 200 (1E08)*
acoustic surface-wave devices; propagation in strained layered substrates of ZnO overlays on fused quartz and glass. *Epstein, M., T-SU 76 May 219 (1F13)*
YIG/ZnO magnetoelastic surface-wave delay lines and convolvers. *Parekh, J. P., T-SU 76 May 218 (1F12)*
ZnO/Si acoustic surface-wave convolvers; memory array with optical or electrical writing and acoustic surface-wave readout. *Coldren, L. A., T-SU 76 May 201 (1E09)*
ZnO thin-film acoustic surface-wave devices; strain effects on propagation characteristics. *Nalamwar, A. L., T-SU 76 May 144-147 (1A08)*
ZnO thin-film acoustic bulk-wave transducers. *Nalamwar, A. L., T-SU 76 May 190 (1D12)*

Z transforms
acoustic surface-wave chirp Z transform processor. *Hays, R. M., T-SU 76 May 195-196 (1E03)*