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Nota di contenuto	I. Whole organ mechanics. Medial-olivocochlear-efferent effects on basilar-membrane and auditory-nerve responses to clicks: evidence for a new motion within the cochlea / J. J. Guinan Jr. ... [et al.]. Pulsating fluid motion and deflection of the stereocilia of the inner hair cells due to the electromechanics of the outer hair cells / A. W. Gummer ... [et al.]. Atomic force microscopic imaging of the intracellular membrane surface of prestin-expressing Chinese hamster ovary cells / H. Wada ... [et al.]. Action of furosemide on the cochlea modeled with negative feedback / S. M. Khanna. Modulation of cochlear mechanics: model predictions and experimental findings of the effect of changing perilymph osmolarity / J. S. Oghalai, C.-H. Choi and A. A. Spector. Measuring the material properties of normal and mutant tectorial membranes / K. Masaki ... [et al.]. Tuning and travel of two tone distortion in intracochlear pressure / W. Dong and E. S. Olson.

Response characteristics of the 6 kHz cochlear region of chinchilla / W. S. Rhode. Stiffness properties of the reticular lamina and the tectorial membrane as measured in the gerbil cochlea / C.-P. Richter and A. Quesnel. Backward propagation of otoacoustic emission in the cochlea / T. Ren, W. X. He and A. L. Nuttall. Medial olivocochlear efferent effects on basilar membrane responses to sound / N. P. Cooper and J. J. Guinan Jr. Modulation patterns and hysteresis: probing cochlear dynamics with a bias tone / L. Bian and M. E. Chertoff. What do the OHCs move with their electromotility? / M. Nowotny and A. W. Gummer. Noise improves peripheral coding of short stimuli / L. K. Rimskaya-Korsakova. Phase and amplitude transfer in the apex of the cochlea / M. van der Heijden and P. X. Joris. Manipulations of chloride ion concentration in the organ of Corti alter outer hair cell electromotility and cochlear amplification / J. Zheng ... [et al.]. Cochlear transducer operating point adaptation / Y. Zou ... [et al.]. Low coherence interferometry of the cochlear partition / N. Choudhury ... [et al.]. Superior semicircular canal dehiscence: mechanisms of air-conducted hearing / J. E. Songer and J. J. Rosowski. On the coupling between the incus and the stapes / W. R. J. Funnell ... [et al.]. Novel otoacoustic baseline measurement of two-tone suppression behaviour from human ear-canal pressure / E. L. Le Page, N. M. Murray and J. D. Seymour. Is the scala vestibuli pressure influenced by non-piston like stapes motion components? an experimental approach / W. F. Decraemer ... [et al.]. Biomechanics of dolphin hearing: a comparison of middle and inner ear stiffness with other mammalian species / B. S. Miller ... [et al.]. -- II. Hair cells. An experimental preparation of the mammalian cochlea that displays compressive nonlinearity in vitro / A. J. Hudspeth and D. K. Chan. Ca dynamics in auditory and vestibular hair cells: Monte Carlo simulations and experimental results / M. M. Bortolozzi, A. Lelli and F. Mammano. Electro-mechanical waves in isolated outer hair cell / S. Clifford, W. E. Brownell and R. D. Rabbitt. "Area change paradox" in outer hair cells' membrane motor / K. H. Iwasa. Chloride and the OHC lateral membrane motor / J. Santos-Sacchi ... [et al.]. Fast adaptation in vestibular hair cells depends on myosin-Ic / P. G. Gillespie ... [et al.]. The piezoelectric outer hair cell: bidirectional energy conversion in membranes / W. E. Brownell. Outer hair cell mechanics are altered by developmental changes in lateral wall protein content / H. C. Jensen-Smith and R. Hallworth. Outer hair cell mechanics reformulated with acoustic variables / J. B. Allen and P. F. Fahey. A model of high-frequency force generation in the constrained cochlear outer hair cell / Z. Liao ... [et al.]. Theoretical analysis of membrane tether formation from outer hair cells / E. Glassinger and R. M. Raphael. Nonlinear responses in prestin knockout mice: implications for cochlear function / M. A. Cheatham, K. H. Huynh and P. Dallos. Mechanical impedance spectroscopy on isolated cells / M. P. Scherer, Z. Farkas and A. W. Gummer. Heat stress-induced changes in the mechanical properties of mouse outer hair cells / M. Murakoshi ... [et al.]. Frequency dependence of admittance and conductance of the outer hair cell / B. Farrell, R. Ugrinov and W. E. Brownell. Modeling outer hair cell high-frequency electromotility in microchamber experiment / Z. Liao ... [et al.]. Chlorpromazine and force relaxation in the cochlear outer hair cell plasma membrane - an optical tweezers study / D. R. Murdock ... [et al.]. Estimation of the force generated by the outer hair cell motility and the phase of the neural excitation relative to the basilar membrane motion: theoretical considerations / M. Andoh, C. Nakajima and H. Wada. Quantification of calcium buffers in various subcellular locations in rat inner and outer hair cells / S. Mahendrasingam, R. Fettiplace and C. M. Hackney -- III. Sterocilia.

Signal transformation by mechanotransducer channels of mammalian outer hair cells / R. Fettiplace, A. C. Crawford and H. J. Kennedy. Stereociliary vibration in the guinea pig cochlea / A. Fridberger ... [et al.]. The cochlear amplifier: is it hair bundle motion of outer hair cells? / S. Jia ... [et al.]. Prestin-lacking membranes are capable of high frequency electro-mechanical transduction / B. Anvari ... [et al.]. Ca<sup>2+</sup> changes the force sensitivity of the hair-cell transduction channel / E. L. M. Cheung and D. P. Corey. Hair bundle mechanics at high frequencies: a test of series or parallel transduction / K. D. Karavitaki and D. C. Corey. Hair cell transducer channel properties and accuracy of cochlear signal-processing / C. J. W. Meulenber and S. M. van Netten. Ca<sup>2+</sup> permeability of the hair bundle of the mammalian cochlea / C. Harasztosi, B. Muller and A. W. Gummer -- IV. Emissions. Comparative mechanisms of auditory function: ground sound detection by golden moles / P. M. Narins. DPOAE micro- and macrostructure: their origin and significance / D. T. Kemp and P. F. Tooman. Physical mechanisms of OAE generation and propagation: the hydrodynamic approach / A. Vetesnik, R. Nobili and A. W. Gummer. Measuring cochlear delays using otoacoustic emissions / R. H. Withnell. Distortion product otoacoustic emissions in the amphibian ear / P. van Dijk and S. W. F. Meenderink. Calcium waves, connexin permeability defects and hereditary deafness / V. Piazza ... [et al.]. Resonant modes of OAE in the investigation of hearing / W. W. Jedrzejczak ... [et al.]. DPOAE fine structure changes at higher stimulus levels - evidence for a nonlinear reflection component / G. R. Long and C. L. Talmadge. The biophysical origin of otoacoustic emissions / J. H. Siegel. Spontaneous otoacoustic emissions in lizards, air pressure effects on them and the question of point sources and global standing waves / G. A. Manley. Development of micromechanically-relevant hair-cell properties: late maturation of hair-cell orientation in the basilar papilla of birds / C. Koppl ... [et al.]. Prediction for audiograms and otoacoustic emissions / M. Furst and Y. Halmut. Are click-evoked and stimulus-frequency OAEs generated by the same mechanism? / R. Kalluri and C. A. Shera. A comparative study of evoked otoacoustic emissions in geckos and humans / C. Bergevin, D. M. Freeman and C. A. Shera -- V. Cochlear models. Cochlear activity in perspective / E. de Boer. A mechanical-electrical-acoustic model of the cochlea / K. Grosh ... [et al.]. Cochlear coiling and low-frequency hearing / R. S. Chadwick ... [et al.]. Multi-scale model of the organ of Corti: IHC tip link tension / C. R. Steele and S. Puria. A micromechanical model for fast cochlear amplification with slow outer hair cells / T. K. Lu ... [et al.]. The cochlea box model once again: improvements and new results / R. Nobili and A. Vetesnik. Four counter-arguments for slow-wave OAEs / C. A. Shera, A. Tubis and C. L. Talmadge. The evolution of multi-compartment cochlear models / A. E. Hubbard ... [et al.]. What stimulates the inner hair cells? / D. C. Mountain and A. E. Hubbard. Active hair-bundle motility harnesses noise to operate near an optimum of mechanosensitivity / P. Martin, B. Nadrowski and F. Julicher. Wave propagation by critical oscillators / D. Andor ... [et al.]. Mechanical energy contributed by motile neurons in the Drosophila ear / M. C. Gopfert and J. T. Albert. Short-wavelength interactions between OHCs: a "squirting" wave model of the cochlear amplifier / A. Bell. Wave propagation in a complex cochlear micromechanics model with curvature / H. Cai, R. S. Chadwick and D. Manoussaki. A 'twin-engine' model of level-dependent cochlear motion / A. J. Aranyosi. A hydro-mechanical, biomimetic cochlea: experiments and models / F. Chen ... [et al.]. Six experiments on a 1-D nonlinear wave-digital filter modeling of human click-evoked emission data / E. L. LePage and A. Olofsson.

Measurements and models of human inner-ear function with superior semicircular canal dehiscence / M. E. Ravicz ... [et al.]. A new multicompartments model of the cochlea / S. Lu ... [et al.]. A 3D finite element model of the gerbil cochlea with full fluid-structure interaction / G. D. Bustard, D. C. Mountain and A. E. Hubbard. Developing a life-sized physical model of the human cochlea / M. J. Wittbrodt, C. R. Steele and S. Puria. Fully micromachined lifesize cochlear model / R. D. White and K. Grosh. A generic nonlinear model for auditory perception / E. W. Large -- VI. Discussion session. Quick questions. Stereocilia and tip links. Somatic motility of outer hair cells. Waves in the cochlea. Fluid flow in the cochlea. Traveling waves in the cochlea. Are traveling waves in the cochlea going in both directions?

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