

PUBLICATIONS

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Book Chapter

1. **H. Hirata**, S. Petryakov, and W. Schreiber. “Resonators for Clinical Electron Paramagnetic Resonance” in: *Measuring Oxidants and Oxidative Stress in Biological Systems*, L. J. Berliner and N. L. Parinandi (eds.) (Part of Biological Magnetic Resonance Book Series, volume 34), Springer Nature Switzerland AG, Basel (2020), pp. 189–218. https://doi.org/10.1007/978-3-030-47318-1_10

Peer-Reviewed Scientific Articles

1. Y. Tomikawa, T. Takano, **H. Hirata**, and T. Ogasawara. An Ultrasonic Motor Using Non-Axisymmetric Vibration Modes of a Piezo-Ceramic Annular Plate. *Japanese Journal of Applied Physics*, Vol. 28, Suppl. 28-1, pp. 161-163 (1989). DOI: 10.7567/JJAPS.28S2.202
2. T. Takano, **H. Hirata**, and Y. Tomikawa. Non-axisymmetric contour vibrations of clamped piezoelectric annular plates: Analysis for the development of an ultrasonic motor. *Journal of the Acoustical Society of Japan (E)*, Vol. 11, No. 3, pp. 161-172 (1990). DOI: 10.1250/ast.11.161
3. T. Takano, Y. Tomikawa, T. Ogasawara, and **H. Hirata**. An Ultrasonic Motor Using Non-Axisymmetric Vibration Modes of a Piezo-Ceramic Annular Plate. *Japanese Journal of Applied Physics*, Vol. 28, Suppl. 28-2, pp. 202-205 (1990). DOI: 10.7567/JJAPS.28S2.202
4. Y. Tomikawa, K. Adachi, **H. Hirata**, T. Suzuki, and T. Takano. Excitation of a Progressive Wave in a Flexurally Vibrating Transmission Medium. *Japanese Journal of Applied Physics*, Vol. 29, Suppl. 29-1, pp. 179-181 (1990). DOI: 10.7567/JJAPS.29S1.179
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8. **H. Hirata** and S. Ueha. Characteristics Estimation of a Traveling Wave Type Ultrasonic Motor. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, Vol. 40, No. 4, pp. 402-406 (1993). DOI: 10.1109/58.251289
9. M. Ono, K. Ito, N. Kawamura, K. C. Hsieh, **H. Hirata**, N. Tsuchihashi, and H. Kamada. A Surface-Coil-Type Resonator for *in Vivo* ESR Measurements. *Journal of Magnetic Resonance, Series B*, Vol. 104, pp. 180-182 (1994). DOI: 10.1006/jmrb.1994.1073

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11. Y. Sakamoto, **H. Hirata**, and M. Ono. Design of a Multicoupled Loop-Gap Resonator Used for Pulsed Electron Paramagnetic Resonance Measurements. *IEEE Transactions on Microwave Theory and Techniques*, Vol. 43, No. 8, pp. 1840-1847 (1995). DOI: 10.1109/22.402269
12. **H. Hirata**, H. Iwai, and M. Ono. Analysis of a flexible surface-coil-type resonator for magnetic resonance measurements. *Review of Scientific Instruments*, Vol. 66, No. 9, pp. 4529-4534 (1995). DOI: 10.1063/1.1145351
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17. **H. Hirata**, T. Walczak, and H. M. Swartz. Electronically Tunable Surface-Coil-Type Resonator for L-band EPR Spectroscopy. *Journal of Magnetic Resonance*, Vol. 142, No. 1, pp. 159-167 (2000). DOI: 10.1006/jmre.1999.1927
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