Physics Hertz

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|  |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  | 11 |  |  |  |  |  |  |  |  |  |  |  | 12 |  |  |  |  |  | 13 |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |  | 15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  | 17 |  |  |  |  |  |  | 18 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  | 27 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **Across****4.** The loss of piezoelectric properties**5.** Decreases the range of amplitudes**8.** Relation between PRP and PRF**12.** Imaging transducers have a \_\_\_\_ sensitivity **13.** Frequency times wavelength **15.** Determined by source and medium **19.** Time it takes to complete one cycle **20.** When the depth of view is shallow, PRF is **21.** Creates electrical signals**22.** Frame rate is measured in**23.** Multiple reflections that are equally spaced **25.** Reduces ringing of the PZT**29.** Imaging depth x 13 microseconds**31.** Protects the active element and 1/4 wavelength thick**32.** PRP and imaging depth are \_\_\_\_\_\_\_ related**33.** Units of pulse repetition frequency**34.** The "bigness" of a wave**35.** Transforms electrical energy into acoustic energy during transmission | **Down****1.** Power divided by area**2.** Provides electrical connection between PZT and the US system **3.** Refraction occurs with which incidence **6.** Impedance is the product of propagation speed and **7.** Which display mode provides information reguarding reflector motion**9.** Range of frequencies in the pulse**10.** Region that starts at the focus and extends deeper**11.** Time it takes for an US system to create a pulse**14.** Minimum value of duty factor**16.** Law associated with refraction**17.** Which resolution is determined by frame rate?**18.** Period is measured in units of **24.** Ability to distinguish two structures lying close together **26.** Used to alter the appearance of lowly reflected objects**27.** Archives ultrasound studies**28.** If frequency is decreased, near zone length is?**30.** The units of attenuation |