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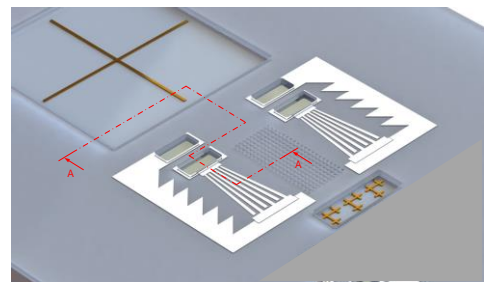
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### 近期代表著作:

1. Liu, Ting-Wei, Tsai, Yao-Chuan, Lin, Yu-Ching, Ono, Takahito, Tanaka, Shuji and Tsung-Tsong Wu (2014) "Design and fabrication of a phononic-crystal-based Love wave resonator in GHz range," *AIP Advances*, **4**, 124201.
2. Meng-Jhen Chiu, Yu-Ching Lin and Takahito Ono, masaoshi Esashi, SihLing Yeh and Tsung-Tsong Wu (2014) "Focusing and waveguiding of Lamb waves in microfabricated piezoelectric phononic plates," *Ultrasonics*, **54**(7), 1984-1990.
3. Liu, Ting-Wei, Lin, Yu-Ching, Tsai, Yao-Chuan, Ono, Takahito, Tanaka, Shuji and Tsung-Tsong Wu (2014) "Evidence of a Love wave bandgap in a quartz substrate coated with a phononic thin film," *Appl. Phys. Letters*, **104**, 181905.
4. Chia-Hao Hung, Wei-Shan Wang, Yu-Ching Lin, Ting-Wei Liu, Jia-Hong Sun, Yung-Yu Chen, Masayoshi Esashi and Tsung-Tsong Wu (2013) "Design and fabrication of an AT-cut quartz phononic Lamb wave resonator," *J. Micromech. Microeng.* **23** (2013) 065025.
5. Wu, Tsung-Tsong, Jin-Chen Hsu and Jia-Hong Sun (2011) "Phononic Plate Waves," *IEEE UFFC*, **58** (10), 2146 -2161.
6. Mourad Oudich, Matteo Senesi, M. Badreddine Assouar, Massimo Ruzenne, Jia-Hong Sun, Brice Vincent, Zhilin Hou, and Tsung-Tsong Wu (2011), "Experimental evidence of locally resonant sonic band gap in two-dimensional phononic stubbed plates," *Physical Review (B)*, **84**, 165136.
7. Huang, Chao-Yi, Sun, Jia-Hong and Wu, Tsung-Tsong (2010) "A two-port ZnO/Silicon Lamb resonator using phononic crystals," *Appl. Phys. Letters*, **97** (3), 031913.
8. Huang, YS, Chen, YY and Wu, Tsung-Tsong (2010) "A passive wireless hydrogen surface acoustic wave sensor based on Pt-coated ZnO nanorods," *Nanotechnology*, **21** (9), 095503.

1.25GHz 拉福波聲子晶體頻溝量測



### 研究計畫:

1. 結合ZnO奈米柱之可攜式表面聲波氫氣/一氧化碳感測器研製
2. 超高頻雙模聲子晶體表面聲波系統之研製