

## Ultra high resolution ultrasound transducers

Applied Functional Materials Ltd (AFM) offers high resolution ultrasonic transducers suitable for high frequency applications over 25MHz. Utilising piezoelectric ceramic composite materials, these transducers provide up to 40 times increase in sensitivity compared to polymer alternatives.

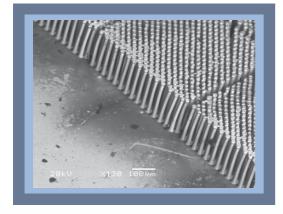
## Benefits of AFM's unique ultrasound transducers

- **High imaging resolution** (e.g. 30µm features can be imaged at 50MHz)
- Opportunities for new enhanced near surface imaging application areas
- Cost effective manufacturing route enables OEM's to supply competitively priced products

## **AFM's Products**

- Based on state-of-the-art ceramic moulding technology
- High performance piezoelectric ceramic composite materials
- Breakthrough in high resolution ultrasound imaging
- 40 times higher sensitivity than PVDF polymer-based transducers
- Single element transducers up to 70MHz
- Array technology suitable for transducers up to 100MHz
- Planar and focussed designs
- Flexible and cost effective manufacturing route
- Custom made devices: the world's highest frequency piezocomposite ultrasound arrays





## **Application areas**

- High resolution ultrasound imaging
- NDT analysis layer thickness detection in difficult materials
   e.g. composites, high sensitivty high resolution immersion testing
- Sonar hydrophones, broadband underwater communication
- Medical imaging in areas of dermatology, wound care, ophthalmology, dentistry, intravascular, genome and drug testing

If you would like more information on AFM's high frequency transducers, I would be delighted to hear from you.

AFM welcomes opportunities to discuss collaboration and co-development

Dr. Hana Hughes hana.hughes@afm-ltd.com www.afm-ltd.com

**Applied Functional Materials Ltd** 

+44 121 414 3036

+44 774 637 0156