

# RSC Applied Polymers

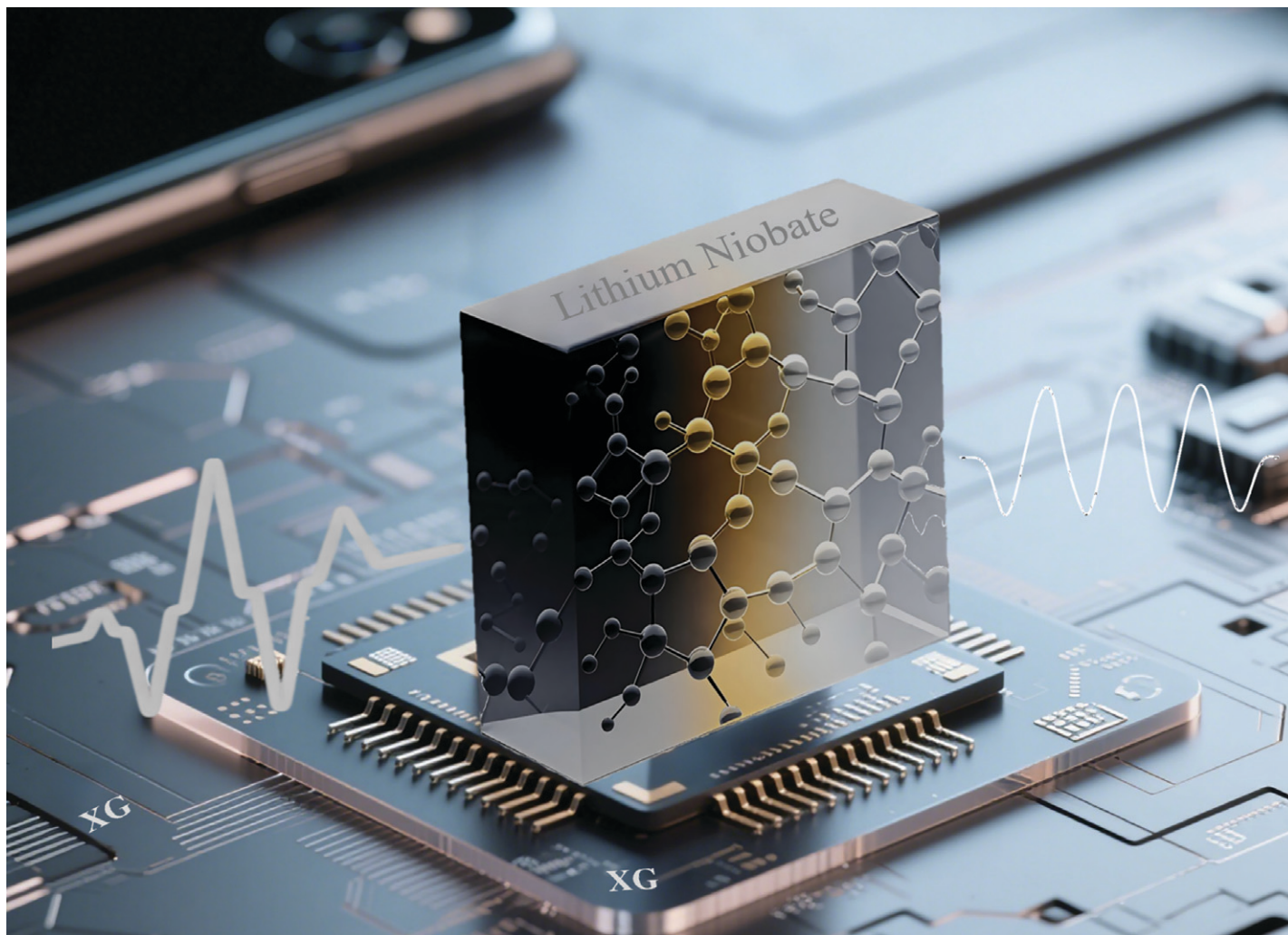
**The application of polymers,  
both natural and synthetic**

**Interdisciplinary and open access**

**[rsc.li/RSCApplPolym](https://rsc.li/RSCApplPolym)**

**Fundamental questions  
Elemental answers**





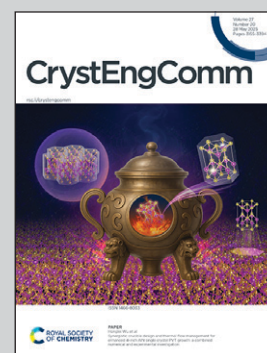
Showcasing research from Professor Kunfeng Chen's laboratory, Institute of Novel Semiconductors, Shandong University, Jinan, China.

Black lithium niobate single crystal: influence of point defects on its microwave properties

Lithium niobate piezoelectric crystal is widely used in various acoustic and microwave devices. Black lithium niobate crystals have different defect concentrations of bipolar, lithium vacancy, anti-site niobium etc. These defects can lead to lattice distortion and the formation of defect dipoles, which affect dielectric loss of acoustic devices.

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As featured in:



See Kunfeng Chen, Gongbin Tang, Dongfeng Xue *et al.*, *CrystEngComm*, 2025, **27**, 3238.