

TERAHERTZ EMISSION FROM INTRINSIC JOSEPHSON JUNCTIONS AT HIGH BIAS AND LOW BIAS

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To have practical applications with THz emission from intrinsic Josephson junctions, the following conditions should be satisfied: tunable operation frequencies, narrow linewidth, high power output and good stability. In low bias and high bias regimes [1,2], THz emission from intrinsic Josephson junctions has been observed by bolometric detection. In the talk, I will show the remarkable difference of THz emission between these two regimes, and discuss the role of a hotspot appearing in the high bias regime. I will convince you with our results that the THz emission at high bias may have feasible applications..

References

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