

Abstract Submitted
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Dipolon Theory of High T_C Superconductors—Experimental Proofs of Dipolon Excitations RAM SHARMA, University of Illinois at Chicago, Chicago, IL — Owing to the success of the dipolon theory [1,2] in explaining and predicting the properties [1-4] of high T_C superconductors (HTSC) some scientists ask whether the dipolons have been observed. Proofs will be revealed that the dipolons have been observed in variety of experiments not only in superconducting state but also in the normal state. The observed photoemission (PE) spectra (broad peak, dip and sharp peak) and a low energy and two high energy kinks (first predicted [3,4] by dipolon theory and observed later on) occur due to dipolons [3], inherent in dipolon-theory-deduced five principles [4] of PE. The dipolons have been observed as several optical excitations [1] in HTSC. The observed plasmons and their dispersions are due to [5] the dipolons. The observed but unexplained optical phonons in HTSC are predicted to be a consequence of dipolons. In experiments, no dipolons means no superconductivity.

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Ram Sharma
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