

Abstract Submitted
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Second Corollary to the Five Principles of Photoemission Via Dipolon Theory of High Temperature Superconductivity RAM R. SHARMA, University of Illinois at Chicago — Recently, we presented theory of dipolon-phonon interaction to explain the isotope shift in HTSC. Also we deduced five principles with one corollary [1] of photoemission (PE) from the dipolon theory [2,3] which not only explained the peak-dip-hump phenomenon [4] and low energy kink in quasiparticle energy dispersion (QED) but also predicted two more high energy kinks [1,4] that have now been observed. Here we present second corollary to the five principles of PE which states: “As one changes dipolon density of states by changing or creating interactions with the factors such as doping, occupation number of ions, vacancies, defects, impurities, phonons with and without different isotope exchange, lattice structure, lattice distortion etc. there appear corresponding changes (shifts) in PE spectra, T_C , QED and the kink structure (predictably, one may observe the apparent isotope shift negative as well as zero or positive depending on the simultaneous action of the other factors).”

[1] R. R. Sharma, “Dipolon Theory..”, in “.. Cuprates”, Ed. K. N. Courtlandt, P. 81-100, Nova Sc, Pub., New York, 2009.

[2] R. R. Sharma, *Phy. Rev.* **B 63**, 054506 (2001).

[3] R. R. Sharma, *Physica C* **439**, 47 (2006).

[4] R. R. Sharma, *Physica C* **468**, 190 (2008)

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