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Dear Editor,

My manuscript NJP-104327 has been refereed by a single Referee, whose very short and negative comment lead to its rejection. As I will discuss in the following, all criticism of the Referee is unsubstantiated.

The Referee criticized two aspects of my manuscript: 1. it being mostly directed towards the ICD community and 2. its topic being too subtle and not conceptually new. The manuscript is directed towards the ICD community, but it is also of interest to the cluster and condensed matter communities as well as indirectly to cancer research. The Referee's criticism 1. is therefore factually wrong. The generalization of the descriptions of non-nearest neighbour ICD is therefore not a subtle topic in itself. Peaks in the ICD spectra of clusters intrinsically carry information about the cluster structure. This fact has not been investigated previously and represents an important progress in the field of ICD. Hence, the Referee's criticism 2. is also unsubstantiated.

One of the topics which presently attract vital attention is to describe the DNA damage following an ICD in water molecules around it. Obviously, in this setting several water molecules at different distances are involved. Understanding the effect of non-nearest neighbour ICD is crucial for the theoretical description of the process and the interpretation of experimental spectra. My manuscript provides a basis for this research. In order to make this more clear I added two sentences stating this explicitly in the introduction:

Especially in the biological systems, in which ICD is discussed to play an important role [20,21,22] the DNA is surrounded by multiple moving water molecules which can act as decay partners. Therefore, understanding the effect of non-nearest neighbour decay will be crucial to study these systems. However, this feature of non-nearest neighbour ICD has so far not been addressed by itself and we will fill the gap in this paper. ...

I am convinced that my article is a valuable contribution for the readership of New Journal of Physics, highly appreciated by scientists considering Interatomic Coulombic Decay (ICD), as well as the transition from atomic and molecular clusters to the solid state and even the causes of cancer.

I kindly ask you to further consider my work for publication in the New Journal of Physics and to request another Referee's opinion.

Yours sincerely,

Elke Faßhauer – author of NJP-104327