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SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	Physical Review & Research International
Manuscript Number:	2013_PRRI_6986
Title of the Manuscript:	Measurements of absolute atomic oxygen density by two-photon absorption laser-induced fluorescence spectroscopy in hot air plasma generated by microwave resonant cavity

PART 2:

PARI 2:	,
FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
The authors were very pro-active in implementing all of the requested revisions. The	
only suggestion would be to include the collisional deactivation discussion in the paper.	
The discussion, as provided to the reviewer is:	
The quenching of excited 0 atoms by ground state 0 atoms is neglected if the atomic oxygen is	
supposed to be a minority species. Anyway, the upper limit of value of the quenching rate	
constant was estimated to be 0.82.10-11 cm3s-1 in an oxygen plasma jet having a sufficiently	
high and controllable degree of dissociation (G Dilecce, M Vigliotti1 and S De BenedictisJ. Phys.	
D: Appl. Phys. 33 No 6 (21 March 2000) L53-L56 "A TALIF calibration method for quantitative	
oxygen atom density measurement in plasma jets").	
Thus, in our case, the radiative time decay of reaction remains shorter than the collisional time	
decay reaction.	
The authors may want to include this in the paper to further bolster their claim that	
collisional deactivation is not that important.	

Note: Anonymous Reviewer

Created by: EA Checked by: ME Approved by: CEO Version: 1.5 (4th August, 2012)