N.	Status	Reviewer	Line(s)	Observation	Action
	✗→To-Do ■→In Progress ✔→Reviewed				
1	✗	1	introduction	The issues related to mesh dependency of the modal contributions to the energy release rate in bi-material interface crack problems are long known in the literature. In this respect, some additional references could be usefully added in the Introduction: 1) I.S. Raju, J.H. Crews Jr., M.A. Aminpour, Convergence of strain energy release rate components for Edge-Delaminated composite laminates, Engineering Fracture Mechanics 30 (3) (1988) 383-396. doi: 10.1016/0013-7944(88)90196-8. 2) A. Agrawal, A.M. Karlsson, Obtaining mode mixity for a bimaterial interface crack using the virtual crack closure technique, International Journal of Fracture 141 (1-2) (2006) 75-98. doi:10.1007/s10704-006-0069-4. 3) R. Krueger, K. Shivakumar, I.S. Raju, Fracture mechanics analyses for interface crack problems - A review, in: Proceedings of the 54th AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics, and Materials Conference, 2013. doi:10.2514/6.2013-1476.	
2	✗	1	section 3	To help understanding, it would be useful to add a figure of the mesh in the neighbourhood of the crack tip showing the delta-sized elements (e.g., in two cases with m = 1 and m = 2) with the indices p and q.	
3	✗	1	section 3	If I correctly understand, the permutation matrix is denoted as P_π in Eq. (7) and as D in Eq. (8). Please, check and unify notation.	
4	✗	1	section 3	The comparison between Eq. (11) and a similar one in the paper by Valvo (2012) is useful, but should be revised: a - the two relations are different because of an additional term in the submitted manuscript. Indeed, Eq. (11) relates the forces at the crack-tip node with the relative displacements at adjacent nodes (on the same mesh). Instead, Valvo (2012) relates forces and displacements at the same crack-tip node (on two different meshes); b - the linear relationship between forces and displacements is not "assumed a priori" in the cited paper, but is an immediate consequence of the linear elastic model; c - also according to Valvo (2012), the crack-tip stiffness matrix is not diagonal in general because of Poisson's effect, as well as material mismatch and geometric asymmetry. The matrix is diagonalised to obtain the mode I and mode II contributions to the energy release rate; d - lastly, consider also the following development: P.S. Valvo, A further step towards a physically consistent virtual crack closure technique, International Journal of Fracture 192 (2) (2015) 235-244. doi:10.1007/s10704-015-0007-4.	

5	✗	1	section 3	In Eq. (12), an operator called Tr appears for the first time, but is not defined. I presume it is the Trace of the matrix, but for clarity it would be better to specify in the manuscript. In Eq. (12), also check the order of the arguments, which maybe have to be rearranged to yield a 2x2 matrix (as in the following equations).
6	✗	1	conclusions	In the Conclusions, the comments about the cited part of the Abaqus User's Manual should be revised. The Manual gives suggestions on how to improve the accuracy of stress and strain calculations in the neighbourhood of the crack tip, as well as of the J-integral (total energy release rate). At least from the cited part, there is no direct reference to VCCT computation of mode I and mode II contributions to energy release rate, which are known to be mesh dependent quantities.
7	✗	1	appendix A	In Appendix A, there is an attemp to cover at the same time both two-dimensional (d = 2) and three-dimensional (d = 3) problems. However, to achieve fully this goal, also matrices in Eqs. (A.1), (A.2), ..., (A.11) should have optional additional columns and rows. This would only add up to confusion. For the sake of clarity, it would be better to focus on the two-dimensional problem only (as concerns equations) and simply state that extension to three-dimensional problems is straightforward.
8	✗	1	appendix A	Again in Appendix A, correct: - "$u_{r,M}, u_{r,F}$ the x-displacement" –¿ "$u_{theta,M}, u_{theta,F}$ the r-displacement"; - "$u_{theta,M}, u_{theta,F}$ the y-displacement" –¿ "$u_{theta,M}, u_{theta,F}$ the theta-displacement".
9	✗	2	introduction/conclusions	In particular, it seems that the paper fails to establish the proper connection with the state of the art literature on VCCT applied to bimaterial cracks. [...] In conclusion, the reviewer suggests to broaden the focus so to consider the relevant contributions from the existing literature such as those provided by Kruger (2014), and to point out the main novelties of their approach wrt the existing ones. A further aspects is that GI and GII computed via VCCT for bimaterial interface cracks are strongly dependent on the assumed crack extension length. Hence, it would be advisable that the Authors puts into evidence this aspect. Another possible extension could be to compare the GI/GII calculations with those computed by means of techniques other than the VCCT, perhaps starting from the horizontal crack case so to have reference results. Finally, the authors could suggest a modified VCCT overcoming the drawbacks of existing revised VCCT such as Valvo (2012) or S. Wang et al. (2013).