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| Reviewers' comments | Authors' response to reviewers' comments |
| [1] Page 2, line 43. Is: "(...) for 32CA reactions."I suggest to: "(...) for 32CA reactions as well as other processes, for which one step,"pericyclic" mechanism has been earlier postulated, such as Diels-Alder reaction [Chemistry Select 2017, 2, 9736; Molecules 2018, 23, 1913], thermal elimination reactions [Theoretical Chemistry Accounts, 136, 129 (2017); Theoretical Chemistry Accounts, 138, 81 (2019)], [3.3]-sigmatropic shifts [Molecules, 24, 462 (2019)] and many other." | Page 2, line 43 has been changed as suggested. Five references Ref. 7-11 have been inserted in the revised version as suggested Ref. 7: Chemistry Select 2017, 2, 9736Ref. 8: Molecules 2018, 23, 1913 Ref. 9: Theoretical Chemistry Accounts, 136, 129 (2017)Ref.10: Theoretical Chemistry Accounts, 138, 81 (2019)Ref. 11: Molecules, 24, 462 (2019) |
| [2] Probably, in the case of all considered paths, pre-reaction molecular complexes are formed in the first reaction stage, before the formation of TS. These type of molecular complexes have only enthalpic nature and has beenrecently detected for many 32CAs involving dibubstitutednitrones [Journal of Molecular Modeling, 24, 329 (2018); Computational and Theoretical Chemistry, 1125, 77-85 (2018); Tetrahedron Letters, 56, 532-535 (2015)]. | In case of all four paths, pre-reaction molecular complexes were formed in the first reaction stage with enthalpic nature. This has been mentioned in Page 6 and represented in Fig. 3. Three references (Ref. 42-44) as suggested have been cited in this context. Ref. 42: Journal of Molecular Modelling, 24, 329 (2018)Ref: 43: Computational and Theoretical Chemistry, 1125, 77-85 (2018)Ref: 44: Tetrahedron Letters, 56, 532-535 (2015) |
| [3] Page 6.Obtained parameters of activation suggest clearly, that considered process should be regio- and stereoselective but not regio- and stereospecific. Independently of CAox formation, other channels should be formally treatmentas not forbidden from kinetic point of view. This should be commented in the text.Next, full regio- and stereoselective 32CA is possible only in the case of strong EWG-activation of ethhylene derivative as well as with unequivalent screening of reaction centers in the nitrone molecule. These type, full regio- and stereoselective cases of nitrone 32CAs has been recently detected on the experimental way [Journal of Heterocyclic Chemistry, 54, 3314-3320 (2017); Journal of Heterocyclic Chemistry, 53, 1424-1429 (2016)]. | This statement has been commented in the text in Page 7 as suggested and the examples of full regio- and stereoselective cases of nitrone 32CAs have been cited as Ref. 45 and Ref. 46.Ref. 45: Journal of Heterocyclic Chemistry, 54, 3314-3320 (2017)Ref. 46: Journal of Heterocyclic Chemistry, 53, 1424-1429 (2016) |
| [4] Page 6 The kinetic preferences of considered reaction paths should be discussed on the basis of DG values. | ∆G and ∆H values of the reaction paths discussed in Page 7 and listed in Table 2. |
| [5] Page 6. The full complete of parameters of the activation (DE, DH, DS, DG) should be collected in the separate table. | ∆E, ∆H, ∆S and ∆G values have been collected in a separate table (Table 2) and explained in Page 7. |

In response to the reviewers' comments, data for thermodynamic parameters (∆E, ∆H, ∆G and ∆S) in gas phase as well as toluene have been provided and discussed in the revised manuscript. Ten additional references have been included as suggested by the reviewer to ensure appropriate credit to the related recent publications.