

锗硅烯与 CH₃OH 加成反应机理及区域选择性

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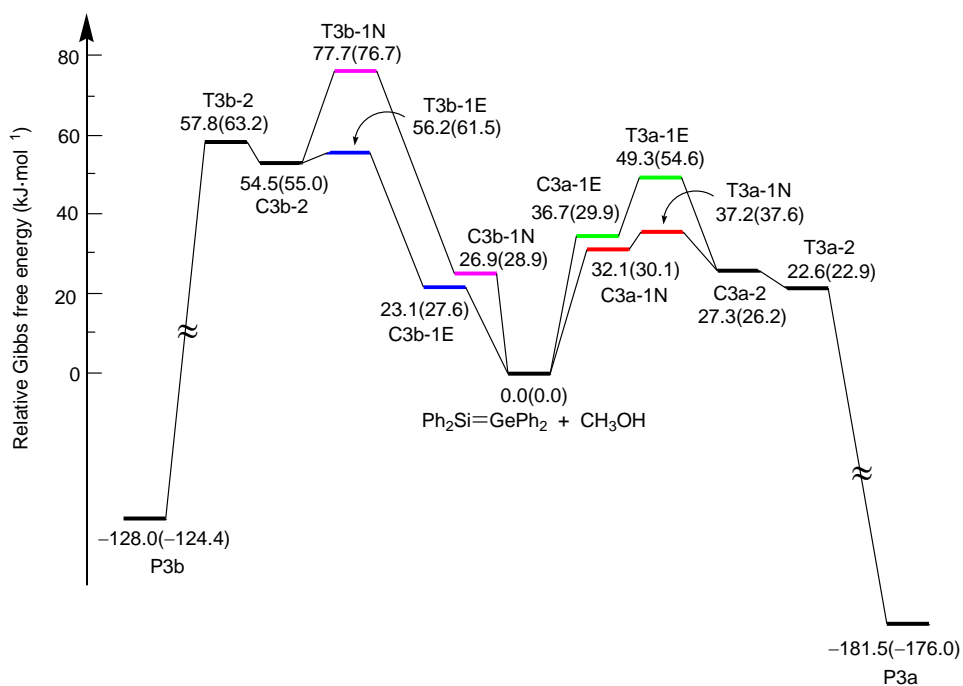
(信阳师范学院化学化工学院, 河南 信阳 464000)

Mechanism and Regioselectivity of Addition Reactions of CH₃OH to Germanesilenes

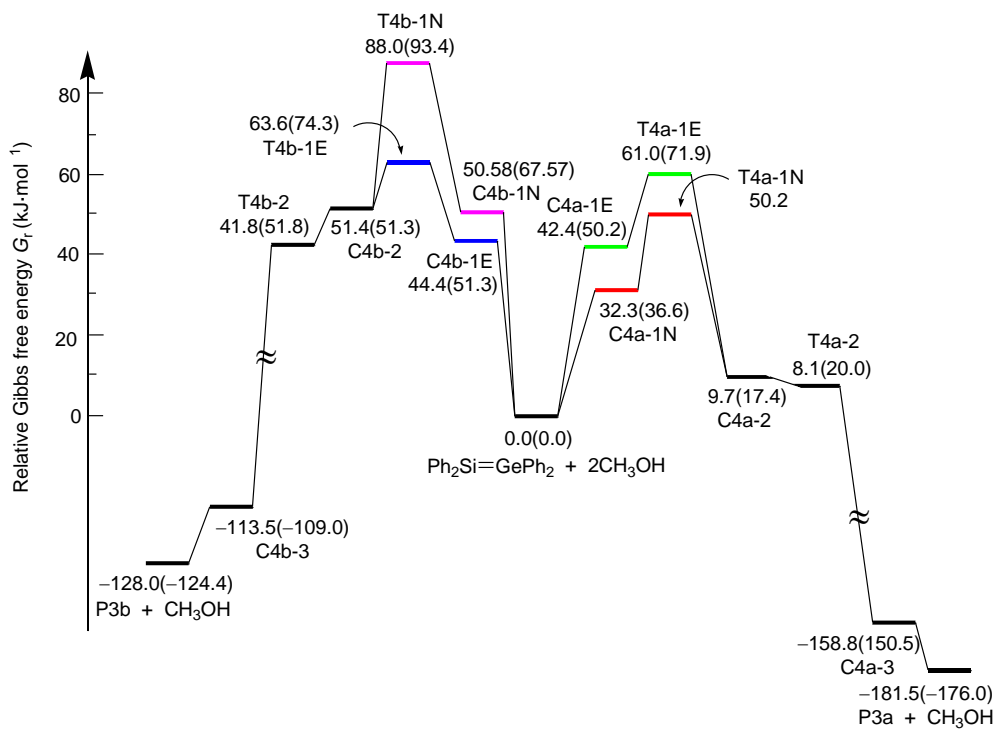
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(a)

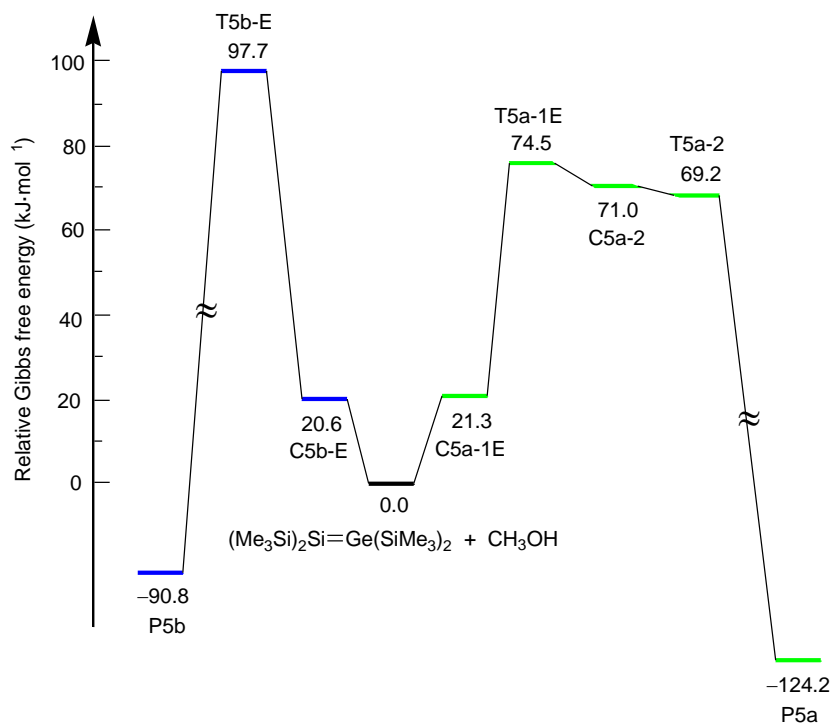


(b)

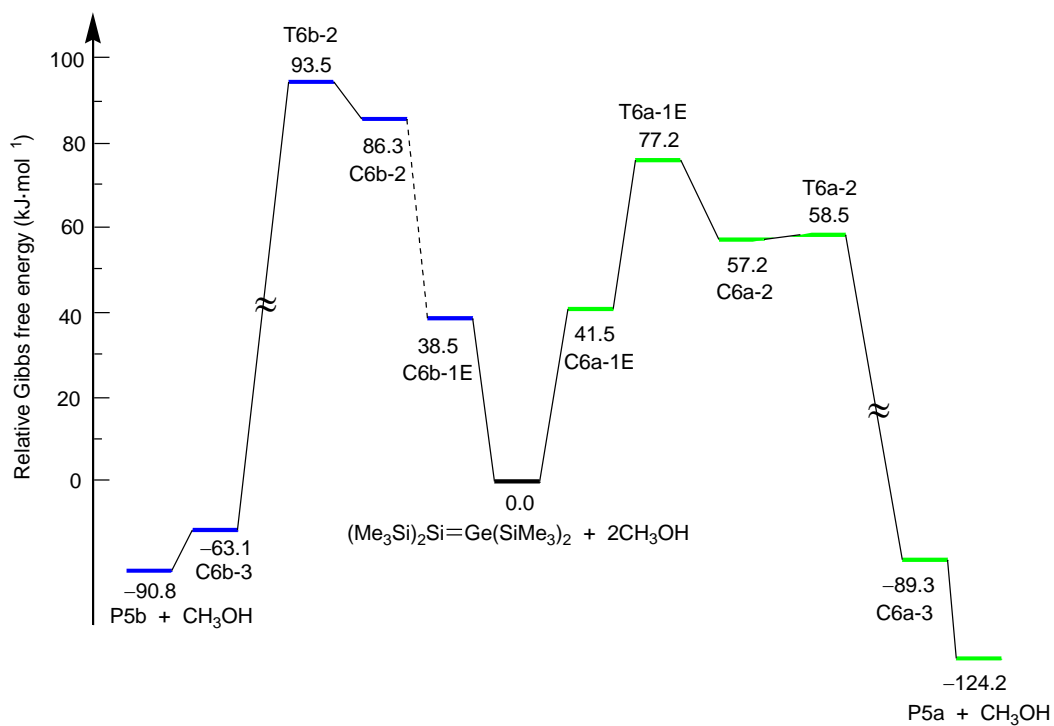
图 S1 反应 3a、3b、4a 及 4b 的自由能势能面

Fig.S1 Free energy profiles of the reactions 3a, 3b, 4a and 4b

(a) reactions 3a and 3b, (b) reactions 4a and 4b; the data in parentheses are results in toluene solvent



(a)

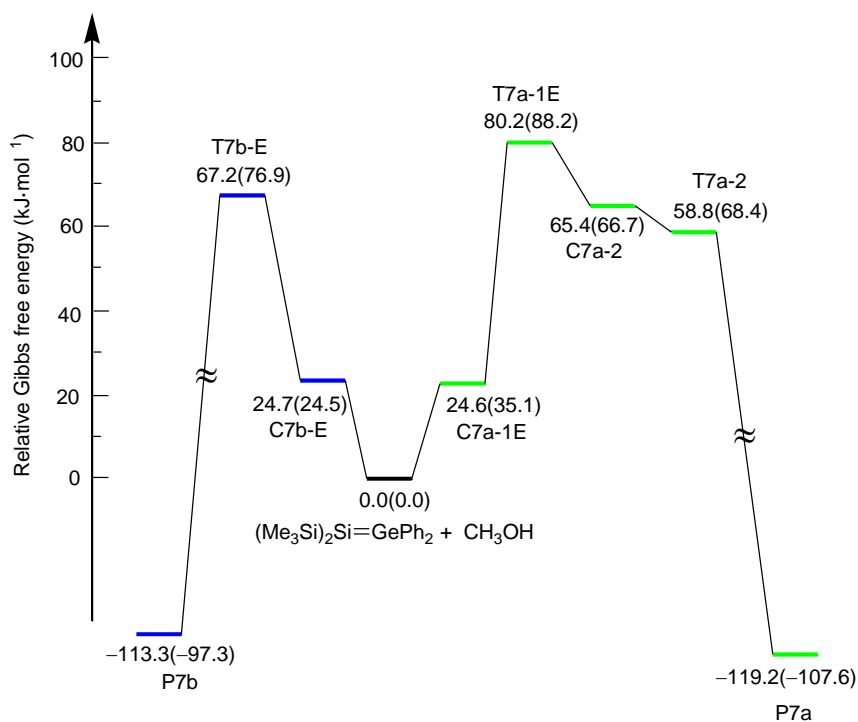


(b)

图 S2 反应 5a、5b、6a 及 6b 的自由能势能面

Fig.S2 Free energy profiles of the reactions 5a, 5b, 6a and 6b

(a) reactions 5a and 5b, (b) reactions 6a and 6b



(a)

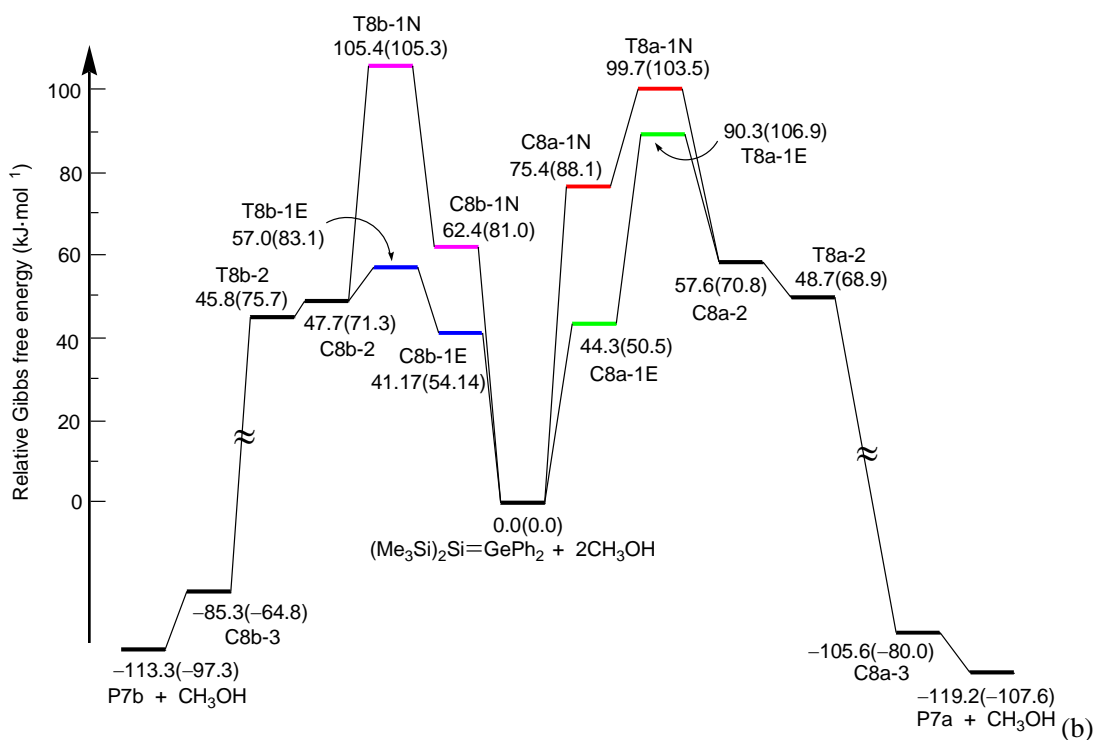
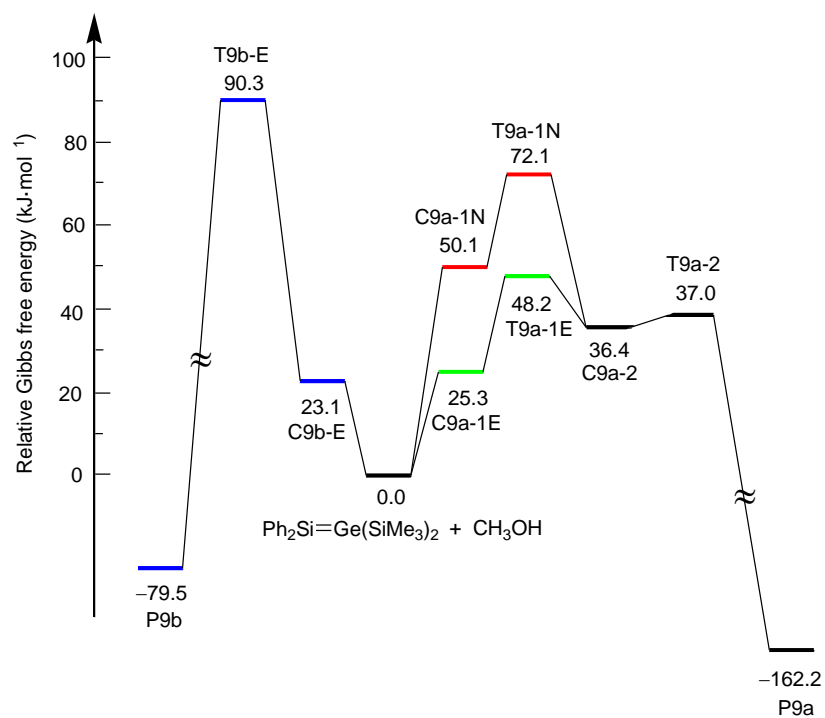


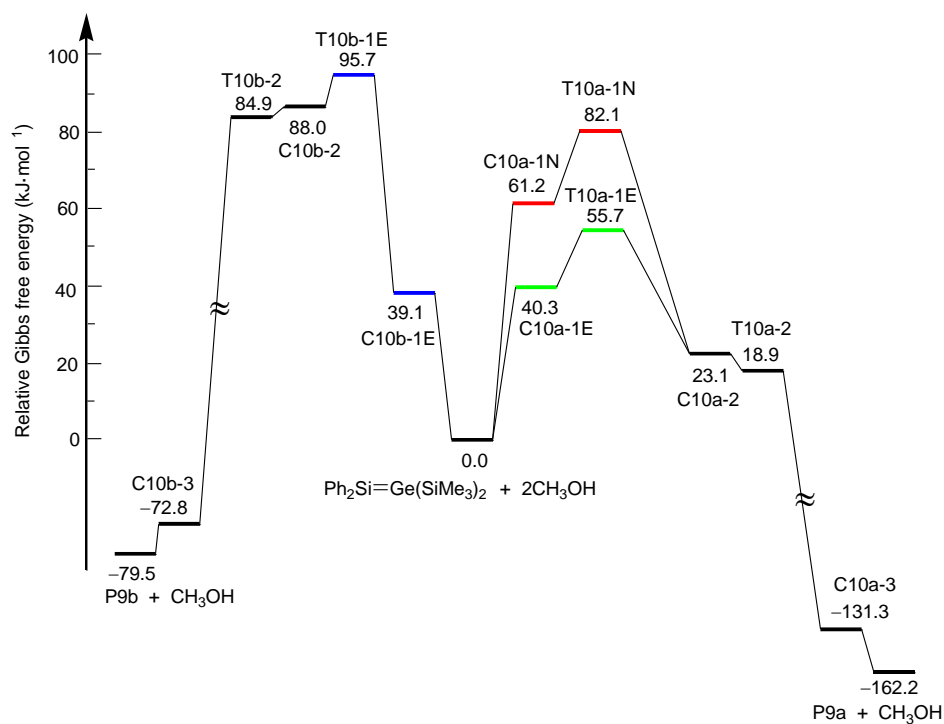
图 S3 反应 7a、7b、8a 及 8b 的自由能势能面

Fig.S3 Free energy profiles of the reactions 7a, 7b, 8a and 8b

(a) reactions 7a and 7b, (b) reactions 8a and 8b; the data in parentheses are results in tetrahydrofuran solvent



(a)

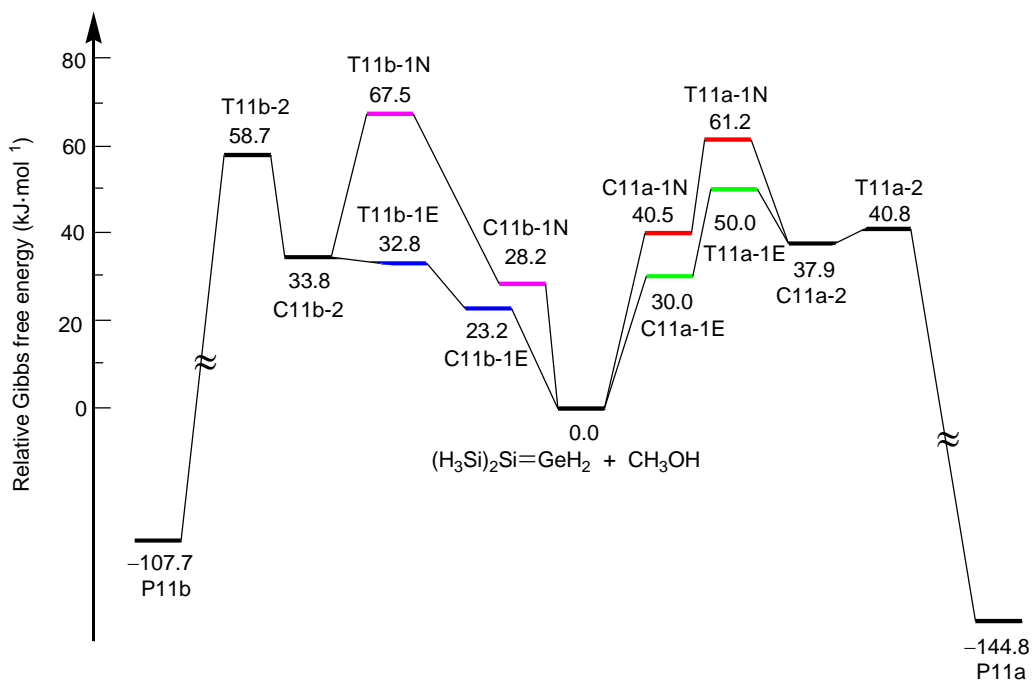


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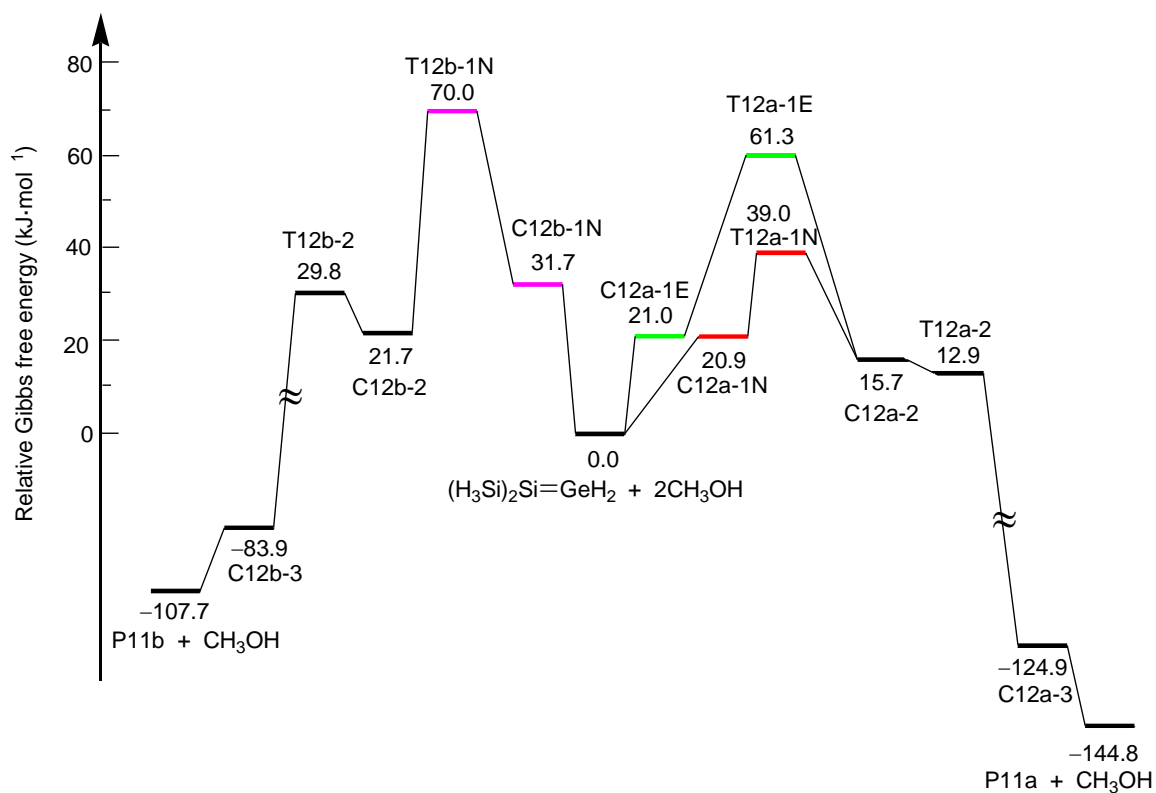
图 S4 反应 9a、9b、10a 及 10b 的自由能势能面

Fig.S4 Free energy profiles of the reactions 9a, 9b, 10a and 10b

(a) reactions 9a and 9b, (b) reactions 10a and 10b



(a)



(b)

图 S5 反应 11a、11b、12a 及 12b 的自由能势能面

Fig.S5 Free energy profiles of the reactions 11a, 11b, 12a and 12b

(a) reactions 11a and 11b, (b) reactions 12a and 12b