

repulsive potential-energy surface

Also contains definition of: late-downhill surface

A surface for an exergonic reaction $A + BC$ in which the col corresponds to considerable separation between the products $A-B + C$. The energy barrier in the potential-energy profile is in the later stages of the reaction path. On such a surface most of the energy is released after $A-B$ is formed. Repulsive surfaces are also called late-downhill surfaces, and the barrier in such a surface is called a Type-II barrier.

Source:

PAC, 1996, 68, 149 (*A glossary of terms used in chemical kinetics, including reaction dynamics (IUPAC Recommendations 1996)*) on page 185