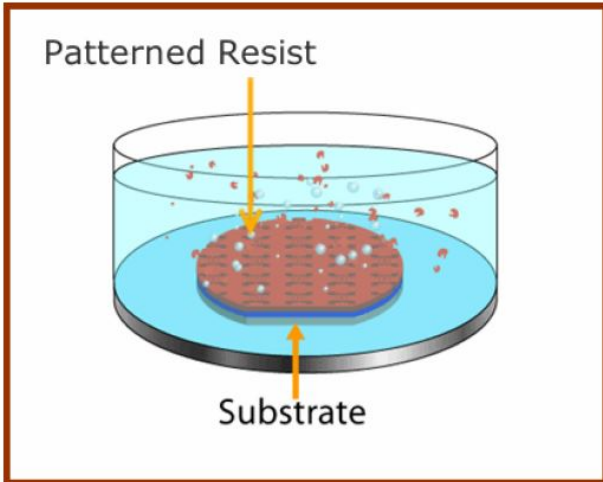


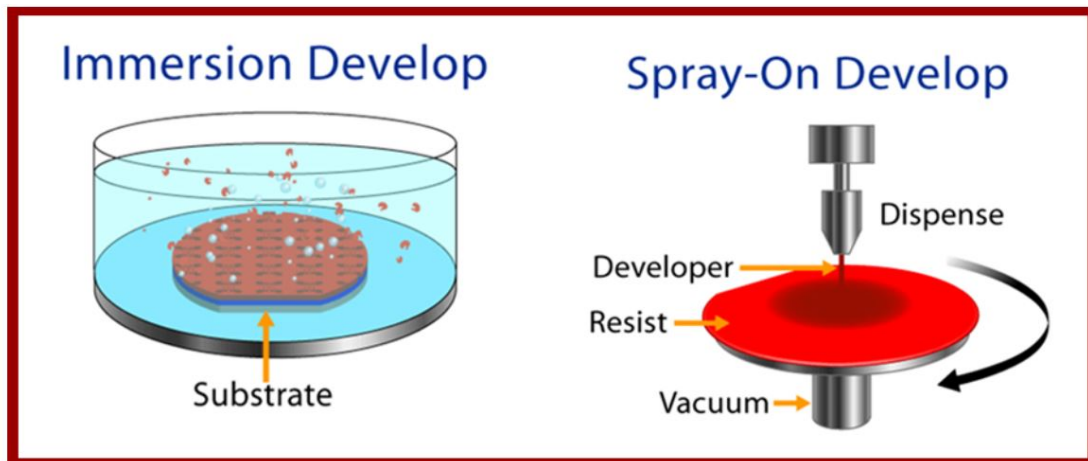
Develop

In the develop process, portions of the photoresist are dissolved by a chemical developer. With positive resist (the more commonly used resist), the exposed resist is dissolved while the unexposed resist remains on the wafer. With negative resist, the unexposed resist is dissolved while the exposed resist remains.



Develop is usually a wet process. The wafers are physically placed in the develop solution (immersion) or the developer is sprayed onto the wafer. The timing of this process is critical. Too long of a time leads to an "overdeveloped resist"; too little of a time leads to an "underdeveloped resist" – both of which negatively affect line width.

An underdeveloped resist could prevent access to the underlying layer by leaving too much resist on the wafer. To stop the chemical reaction of the developer with the photoresist, the wafers are rinsed with deionized (DI) water then spin-dried.



Immersion and Spray-on