The h-index is based on the distribution of citations received by a given author's publications, e.g., if Jane Smith’s h-index is 16, this means 16 of her publications have been cited 16 or more times.
The h-index is designed to improve upon calculations that are based simply on an author’s total number of citations or publications. It attempts to measure the scientific productivity of the author, as well as his/her scientific impact.
Note that the h-index works properly only when comparing researchers working in the same field and at the same stage of their careers.