

Five Significant Publications

- Applies to the following series: Ladder Rank, in-Residence, Adjunct (research oriented) and Professional Research Appointees
- Required for actions that require CAP review.
- Purpose of this document: puts the burden of proof on the selected publications to satisfy the criterion for creativity
- Content: a selection of the candidate's 5 most significant publications since his/her last career advancement or appointment
- Rules:
 - Should be a separate document that is no longer than 2 pages in length and should compliment the personal statement should a statement be provided by the candidate
 - Publications to be listed with proper citations, corresponding bibliography number (do not renumber these publications from 1-5) and the publications must either be published or in press
 - Citations should be followed with brief statements illustrating the candidate's role in writing the publication
 - No two candidates may share the same publication in their list of five significant publications (Exception: in the case of first or last authors, in which case the Department Chair must verify in writing that both candidates' creative efforts and equally and substantively reflected in the publication)
 - Copies of these five significant publications must be submitted with the dossier

Example:

Albert Einstein – 5 Most Significant Publications:

- A.39. **Einstein, A.**, Copernicus, N. Descartes, T. A., Newton, I., Tesla, N.
Conclusions Drawn from the Phenomena of Capillarity. *Annalen der Physik* (ser. 4), 4:513–523 (1901).

Proposes the theory that the interactions between all molecules are a universal function of distance, in analogy with the inverse-square force of gravity. Once parameterized, this theory makes reasonably accurate predictions for heavier hydrophobic molecules, but fails for lighter molecules. I was the principle investigator of this project. I conducted and managed the experiment, collected data, and wrote the majority of the paper.

- A.57. Descartes, T. A., Copernicus, N. **Einstein, A.**, Newton, I., Tesla, N.
On the Theory of Light Production and Light Absorption *Annalen der Physik* (ser. 4). 20:199–206 (1906).

Reconciles *independent* derivations of the blackbody formula $E=hf$ with Planck's derivation. Planck's derivation of this formula ascribed it to a restriction on the energy changes possible when radiation is produced or absorbed by matter, which implied no restriction on the energies of either matter or radiation. The previous derivation shows a restriction on the energy of radiation alone, but this paper takes a modern approach to the idea that the energies of both matter and radiation are quantized. I was Co-PI of this project and wrote 50% of the article.

Note: This document is not meant to replace the bibliography and should not be reiterated in the personal statement.

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