## Top 10 Popular Science



(Commits many sins of omission, few or none of commission.)

Lucretius *On the Nature of Things* Kept a naturalistic philosophy of nature, including atomism, alive for centuries. The only poem on my list, unfortunately.

Darwin Voyage of the Beagle Greatest scientific travel book, hands down.

Darwin *Origin of Species* Greatest popular science book ever, hands down. No equations, and written in colloquial English, yet profound and scientifically rich.

Darwin *Descent of Man* Bringing biology to bear on the human sciences.

Watson *The Double Helix* The idol revels in his feet of clay. An amazing performance, and a great literary achievement.

Newton *Opticks* (Queries section) Newton's mind was so powerful that most of his writing is hard going, not for lack of clarity, but due to his overwhelming density of invention, and the high standard of precision he maintained. But in the Queries Newton loosened up, and allowed himself to meander and speculate. It set the agenda for several generations of physicists and chemists, and it's an exhilarating read, even today. The pseudo-question conceit anticipated Jeopardy, too.

Galileo *The Starry Messenger* In this brief pamphlet Galileo explained, in simple prose and diagrams, some amazing discoveries he had made with his new instrument, the telescope: the physicality of the Moon (mountains, shadows, ...), the nature of the Milky Way, and above all the four major "planets" around Jupiter. Overnight it changed the literate world's concept of the Cosmos, from mystical/symbolic/ethereal to physical.

Galileo *Dialogues on the Two Great World Systems* This is a masterpiece of baroque prose and polemic, great fun to read even today. It made the Copernican revolution popular, and got Galileo into very hot water.

Abbott *Flatland* Possibly the best introduction to geometry, and math in general, for imaginative preteens. Several prominent mathematicians and physicists I know were inspired by it.

Hofstadter Godel, Escher, Bach Wonderful integration of science and art. We need more like this

Frank Wilczek