1. Record Nr. UNINA9910300541703321 Autore Kragh Helge Titolo From Transuranic to Superheavy Elements: A Story of Dispute and Creation / / by Helge Kragh Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2018 **ISBN** 3-319-75813-6 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (106 pages) Collana SpringerBriefs in History of Science and Technology, , 2211-4564 Disciplina 546.44 Soggetti **Physics** Chemistry—History Nuclear physics Heavy ions Nuclear chemistry History Philosophy and science History and Philosophical Foundations of Physics History of Chemistry Nuclear Physics, Heavy Ions, Hadrons **Nuclear Chemistry** History of Science Philosophy of Science Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Sommario/riassunto The story of superheavy elements - those at the very end of the periodic table - is not well known outside the community of heavy-ion physicists and nuclear chemists. But it is a most interesting story which deserves to be known also to historians, philosophers, and sociologists of science and indeed to the general public. This is what the present work aims at. It tells the story or rather parts of the story, of how

physicists and chemists created elements heavier than uranium or

searched for them in nature. And it does so with an emphasis on the frequent discovery and naming disputes concerning the synthesis of very heavy elements. Moreover, it calls attention to the criteria which scientists have adopted for what it means to have discovered a new element. In this branch of modern science it may be more appropriate to speak of creation instead of discovery. The work will be of interest to scientists as well as to scholars studying modern science from a metaperspective.