Scientometric and Historiographical Maps of Scientific Products of Iranian Marine Researchers on Caspian Sea Basin in "Web of Science" During 1992-2013

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Abstract

To visualize the structure of Iranian marine scientific outputs related to the Caspian Sea basin in the Web of Science (WOS) during 1992-2013, we used scientometric techniques and HistCite software. With keyword search "Caspian Sea" in database, 323 scientific documents were recognized, and the most important authors and institutions, the co-authorship factor, the rate of marine scientific researches related to the Caspian Sea, format and language of these production, and historiographical map were determined and depicted. The findings indicated that the growth rate of marine scientific productions was %51. These resulted documents were published by 156 journals in 6 different formats. The relevant articles were written mostly in English language by 819 authors who were affiliated to 293 organizations. Most documents on Iranian marine scientific products were published by Iranian Journal of Fisheries Scinces during the study period. The results indicated that the growth of scientific production on the Caspian basin had increased from one title in 1992 to 40 titles in 2013. Moreover, collaboration coefficient 0/68 demonstrated existence of an appropriate level of collaboration among Iranian authors. The results of the mapping showed a total of 6 clusters that were formed based on the TLCS and 5 clusters based on TGCS. The most significant subject areas turned up to be marine invasive species, marine pollutants especially heavy metals in water, sediment and marine livings.

Keywords: Scientomericst, Citation analysis, Scientific outputs, Historiographical map, Web of Science, Caspian Sea, Iran.