SCIENTIFIC WORKS

PART 1

PUBLICATIONS IN INTERNATIONAL JOURNALS

A list of publications in English, plus citation data, h-index and i10-index, can be found at the Google Scholar page:

https://scholar.google.com/citations?hl=en&user=Al2exskAAAAJ&view_op=list_works

See also my ResearchGate page: https://www.researchgate.net/profile/Georgios_Tsaparlis

JUNE 2020
A: LIST OF ORIGINAL PUBLICATIONS IN INTERNATIONAL PEER-REVIEWED JOURNALS

NOTES:
1. PAPERS ARE CATEGORIZED ACCORDING TO TOPIC. Some papers appear under more than one topic.
2. The full texts (in pdf) of papers published in the electronic journal Chemistry Education Research and Practice can be downloaded from http://www.rsc.org/cerp

Physical Chemistry (Quantum Chemistry)


Teaching and Learning Quantum Chemistry


Teaching and learning physical chemistry


Tsaparis, G. (2016). The logical and psychological structure of physical chemistry and its relevance to graduate students’ opinions about the difficulties of the major areas of the subject. *Chemistry Education Research and Practice*, 17, 320-336. DOI: 10.1039/C5RP00203F.

Problem solving in science - Effect of psychometric factors


Problem solving in science – Application of complexity theory


Problem solving in science – General


Higher-order cognitive skills (HOCS)


Concepts


Tsaparlis G., Pappa E. T., & Byers, B. (2018). Teaching and learning chemical bonding: Research-based evidence for misconceptions and conceptual difficulties experienced by students in upper secondary schools and the effect of an enriched text. Chemistry Education Research and Practice, 19(4) 1253-1269. DOI: 10.1039/C8RP00035b. (Plus Supplementary files, DOI: C8RP00035b1, C8RP00035b2, C8RP00035b3.)


Structural concepts


Tsaparlis G., Pappa E. T., & Byers, B. (2018). Teaching and learning chemical bonding: Research-based evidence for misconceptions and conceptual difficulties experienced by students in upper secondary schools and the effect of an enriched text. Chemistry Education Research and Practice, 19(4) 1253-1269. DOI: 10.1039/C8RP00035b. (Plus Supplementary files, DOI: C8RP00035b1, C8RP00035b2, C8RP00035b3.)


**Instructional methodology**


**Secondary chemistry curricula**


**Undergraduate general chemistry textbooks**


**Primary science education**


**History and philosophy of science**


**Book reviews**


**Review articles**

