

## Formal Concept Analysis for Amino Acids Classification and Visualization

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Formal concept analysis (FCA) is a method based on lattice theory, widely used for data visualization, data analysis and knowledge discovery. Amino acids (AAs) are chemical molecules that constitute the proteins. In this paper is presented as an easy way of visualizing of the structure and properties of AAs. In addition, we performed a new Hydrophobic-Polar classification of AAs using FCA. For this, the 20 proteinogenic AAs were clustered, classified by hydrophobicity and visualized in Hasse-diagrams. Exploring and processing the dataset was done with Elba and ToscanaJ, some FCA tools and Conceptual Information System (CIS).

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