

Database for Solar Energy Group

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Copper zinc tin sulfide (CZTS) is the abundant quaternary semiconducting compound which could be used to make solar thin film. Even though its efficiency is lower than the silicon based film, the cost of CZTS solar film will be lower compared to the current silicon based film. Therefore it is really worth to do research and make improvement on its efficiency. So far, the solar energy group already collected a great bunch of data, which could be employed to guide the future experiment. Hence, it is really necessary to build a database to arrange the information we got. Our project this summer is to design such a database, which will not only focus on the searching function, but also try to make it able to finish some basic calculation. Furthermore, We also need to consider about the flexibility to the form of data. For instance, we need to make data be easily inserted to other softwares, like Matlab and SAS, to do some more complex calculation and regression. As for the methods, after comparing different software, we decide to employ MS Access to build the database. In addition, I also need to get some feedbacks from the members from the group to improve the design. I think at the end of this program we should have a proper database which will enhance the research in statistic and mathematic perspective.