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Science

## *Infrared-Sensitive Organic Photovoltaic Cells Using Lead Phthalocyanine*

With growing concerns about global warming and energy availability, an increased effort has been made to provide alternative energy sources. In the field of solar energy, work is being done to develop organic photovoltaic cells as a possibly more cost-efficient alternative to conventional silicon-based cells. Organic materials also offer a great variety of characteristics to allow for specialized and novel applications of solar cells. My research focused on developing a cell using organic materials that absorb in the infrared region of the solar spectrum. I studied how the structure of one such organic, Lead Phthalocyanine, affected the absorbance spectrum and how the cell development could be modified as to best utilize this structure-dependence. Through further research, infrared organic solar cells may soon be applied to windows, generating energy while still allowing the visible light through.



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