Ultrathin nano-sheets developed by IIT-Gn

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Ahmedabad: A team of researchers at Indian Institute of Technology, Gandhinagar (IIT-Gn) has developed an extremely transparent nano-material. The nano-sheets are rich in boron unlike graphene that is based on carbon. The boron makes them not only highly transparent, it also provides material scientists a wonderful platform to utilize its rich chemistry.

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"Such thinness gives them unusual properties: they do not absorb visible light but strongly absorb ultraviolet light. This can prove very useful in making UV-blocking coatings that still allow visible light to pass," said Jasuja.

He added that not much was known about these nano-sheets yet. But it would be worth exploring if, like their optical properties, their mechanical and thermal properties are also similarly at extremes, said Jasuja. His team of researchers including doctoral student Saroj Kumar Das, Master's student Amita Bedar, and undergraduate student intern Aadithya Kannan.