

Optical probing of topology and interactions in graphene moiré systems

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Twisted two-dimensional layers have unfolded as the ultimate frontier in quantum materials. The engineering and understanding of their electronic, magnetic and optical properties calls for novel probing techniques. We present various nanoscale infrared and terahertz optoelectronic probing schemes that shed light on the interplay between topology and interactions. The power of photoresponse lies in its ability to diagnose a wide range of phases resulting from broken symmetries in moiré materials. This understanding is essential for the design of quantum material systems with tailored properties.

References

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Figures

