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## Raman Spectral Trends in 'low-temperature' Carbonaceous Materials.

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Amorphous carbonaceous materials are typically those that would be considered immature, at temperatures below 300°C, in a typical sedimentary basin burial setting. Only recently has there been much discussion on the efficacy of Raman spectroscopy on amorphous carbon at temperatures below 300°C. Here we present data from a variety of published sources alongside our own data reviewing the apparent trends in amorphous carbon with some discussion related to thermal regime (intensity, duration), with case studies including intruded host rocks, fold and thrust belts and wildfires. We conclude that Raman spectroscopy can be applied successfully to 'low-temperature' carbonaceous material whilst noting the challenges faced to fully understand the physio-chemical mechanisms at these temperature ranges.