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*A review on the fractal geometry theory for porous media and its applications*

Available data have been shown that the microstructures of naturally formed porous media such as soil, rocks, sandstones, oil/gas/water reservoirs, biological tissue and organics, etc. are fractal objects and can be described by the fractal geometry theory and technique. This presentation attempts to review and summarize the progresses on research in the area of the fractal geometry theory and technique for porous media. Then, review and summary are presented for the progresses on research of the applications of the theory and technique in the areas such as transport properties of fractal porous media regarding the thermal conductivities, permeabilities, gas diffusivity and imbibitions based on the fractal geometry theory and technique for porous media. Finally, a few of comments are made with respect to the theoretical developments and applications in the future.

Keywords: Fractal, Transport properties, Porous media.

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