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MHD stagnation-point flow and heat transfer past a non-isothermal shrinking/stretching sheet in porous medium with heat sink or source effect

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Highlights

- MHD stagnation-point flow and heat transfer past a non-isothermal shrinking/stretching sheet in porous medium in presence of heat sink or source is investigated.
- The solutions of steady flow are obtained even with higher shrinking rate due to magnetic field and porous medium.
- Dual solutions for some cases of shrinking sheet are found, but solution in stretching sheet case is always unique.
- For direct variation of wall temperature along the sheet heat absorption occurs and it grows with heat source.
- In inverse variation of wall temperature, a smooth zik-zak nature of temperature profile is noticed with normal heat transfer characteristic for shrinking sheet case.

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