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cases	authors	Xin Zhong	authors	Xin Zhong		
	title	Strong solutions to the Cauchy problem of the two-dimensional non-baratropic non-resistive magnetohydrodynamic equations with zero heat conduction	title	Singularity formation to the Cauchy problem of the two-dimensional non-baratropic magnetohydrodynamic equations without heat conductivity		
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	abstract	This paper concerns the Cauchy problem of the non-baratropic non-resistive magnetohydrodynamic (MHD) equations with zero heat conduction on the whole two-dimensional (2D) space with vacuum as far field density. By delicate weighted energy estimates, we prove that there exists a local strong solution provided the initial density and the initial magnetic decay not too slow at infinity.	abstract	We study the singularity formation of strong solutions to the two-dimensional (2D) Cauchy problem of the non-baratropic compressible magnetohydrodynamic equations without heat conductivity. It is proved that the strong solution exists globally if the density and the pressure are bounded from above. In particular, the criterion is independent of the magnetic field and is just the same as that of the compressible Navier-Stokes equations. Our method relies on weighted energy estimates and a Hardy-type inequality.		
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