

Figures 25–40

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See Note_V2.pdf for the explanation of figures below.

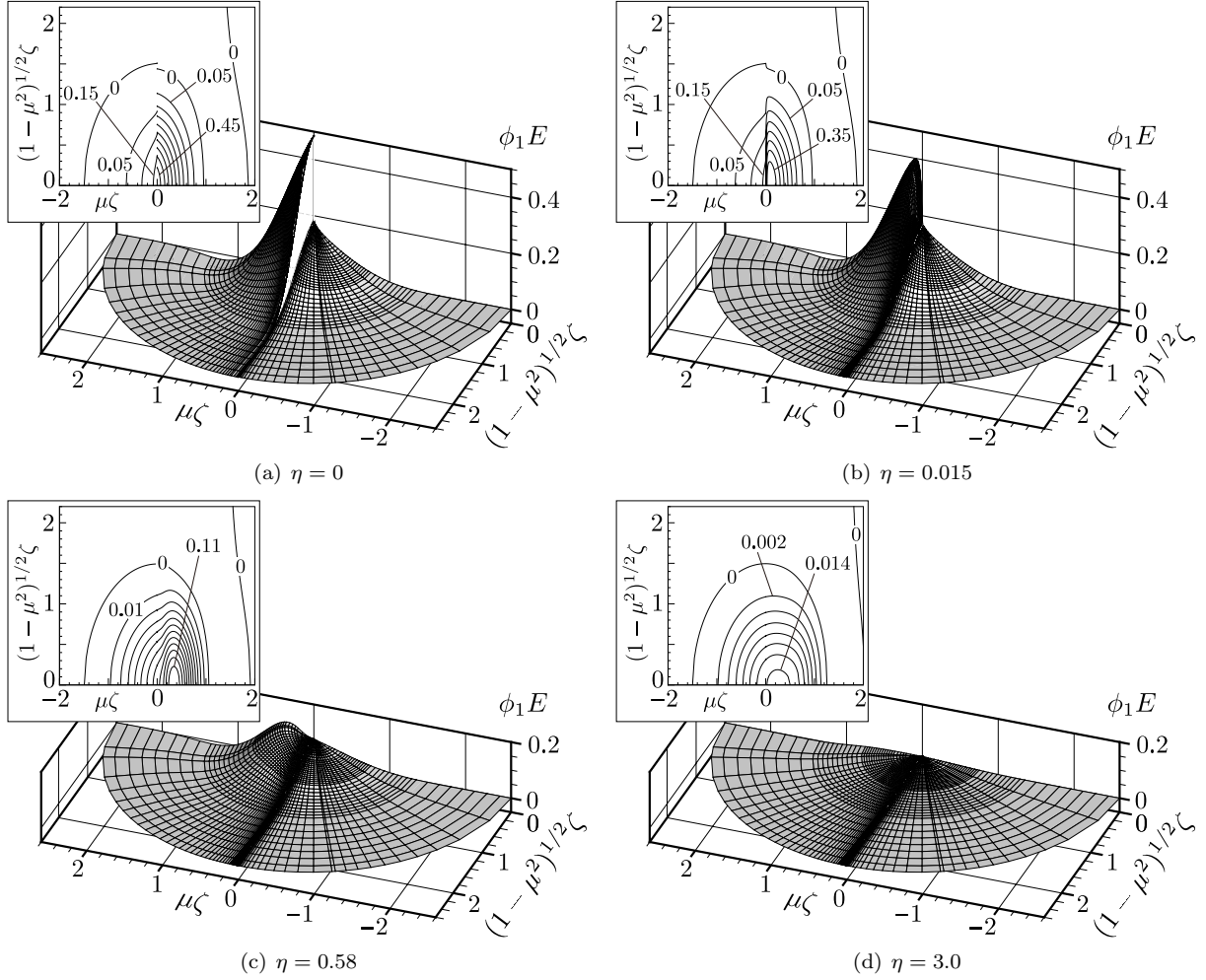


Figure 25: $\phi_1 E$ for the BGK model under the diffuse reflection condition and its contour plots at four spatial points. (a) $\eta = 0$, (b) $\eta = 0.015$, (c) $\eta = 0.58$, and (d) $\eta = 3.0$. In the contour plots, the curves are drawn with the intervals 0.05 in (a) and (b), 0.01 in (c), and 0.002 in (d). The white vertical surface at $\mu\zeta = 0$ in (a) shows the discontinuity.

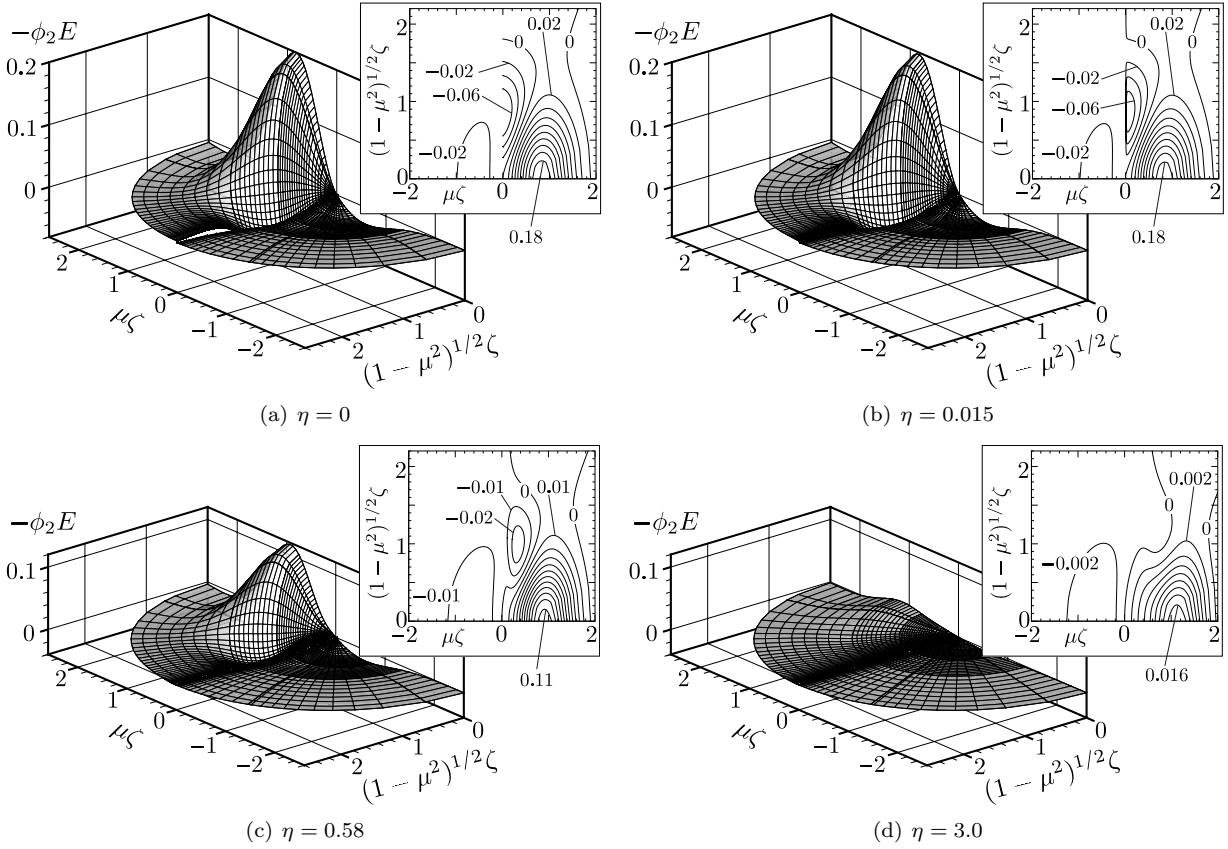


Figure 26: $\phi_2 E$ for the BGK model under the diffuse reflection condition and its contour plots at four spatial points. (a) $\eta = 0$, (b) $\eta = 0.015$, (c) $\eta = 0.58$, and (d) $\eta = 3.0$. In the contour plots, the curves are drawn with the intervals 0.02 in (a) and (b), 0.01 in (c), and 0.002 in (d). The white vertical surface at $\mu\zeta = 0$ in (a) shows the discontinuity.

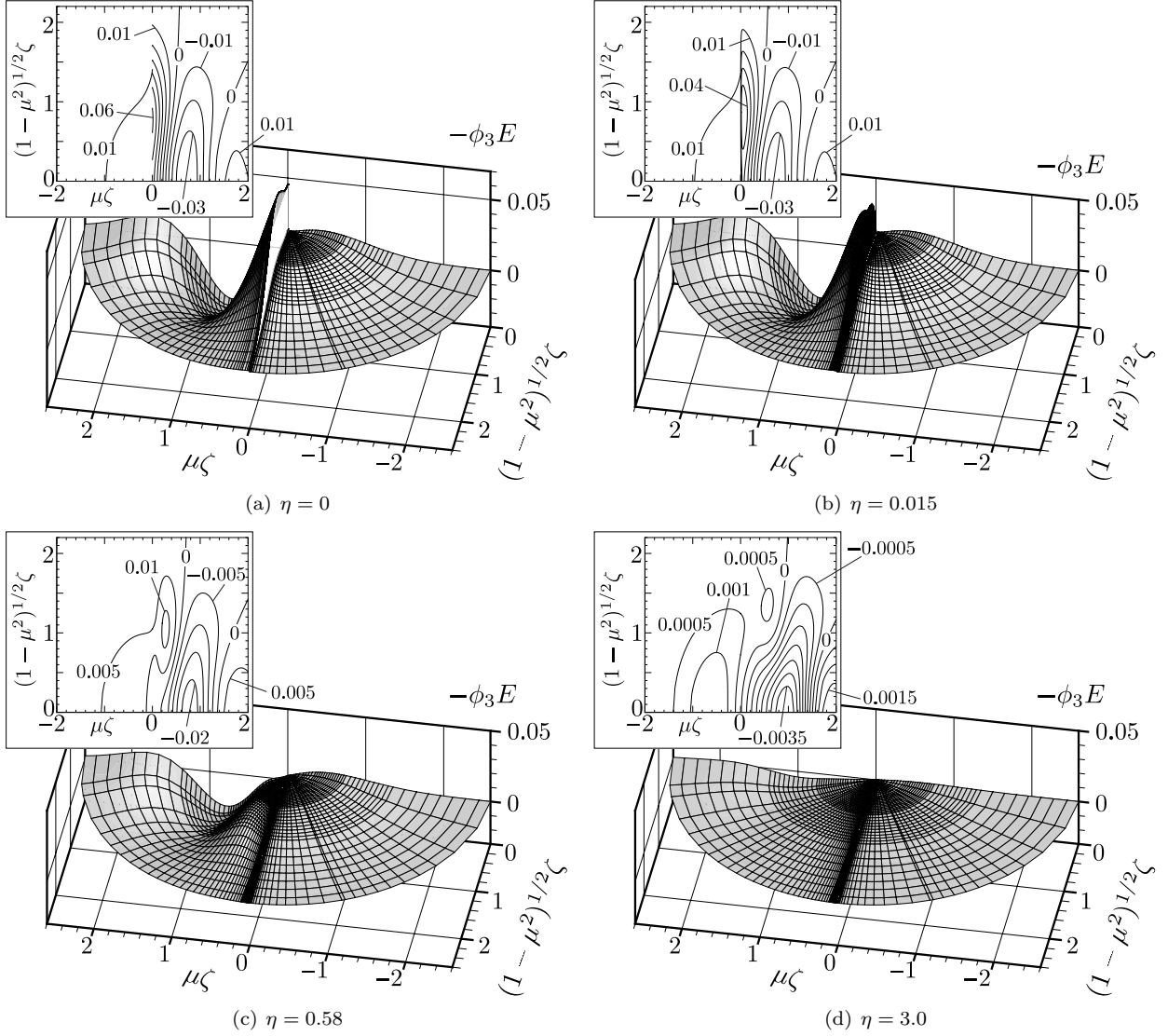


Figure 27: $\phi_3 E$ for the BGK model under the diffuse reflection condition and its contour plots at four spatial points. (a) $\eta = 0$, (b) $\eta = 0.015$, (c) $\eta = 0.58$, and (d) $\eta = 3.0$. In the contour plots, the curves are drawn with the intervals 0.01 in (a) and (b), 0.005 in (c), and 0.0005 in (d). The white vertical surface at $\mu\zeta = 0$ in (a) shows the discontinuity.

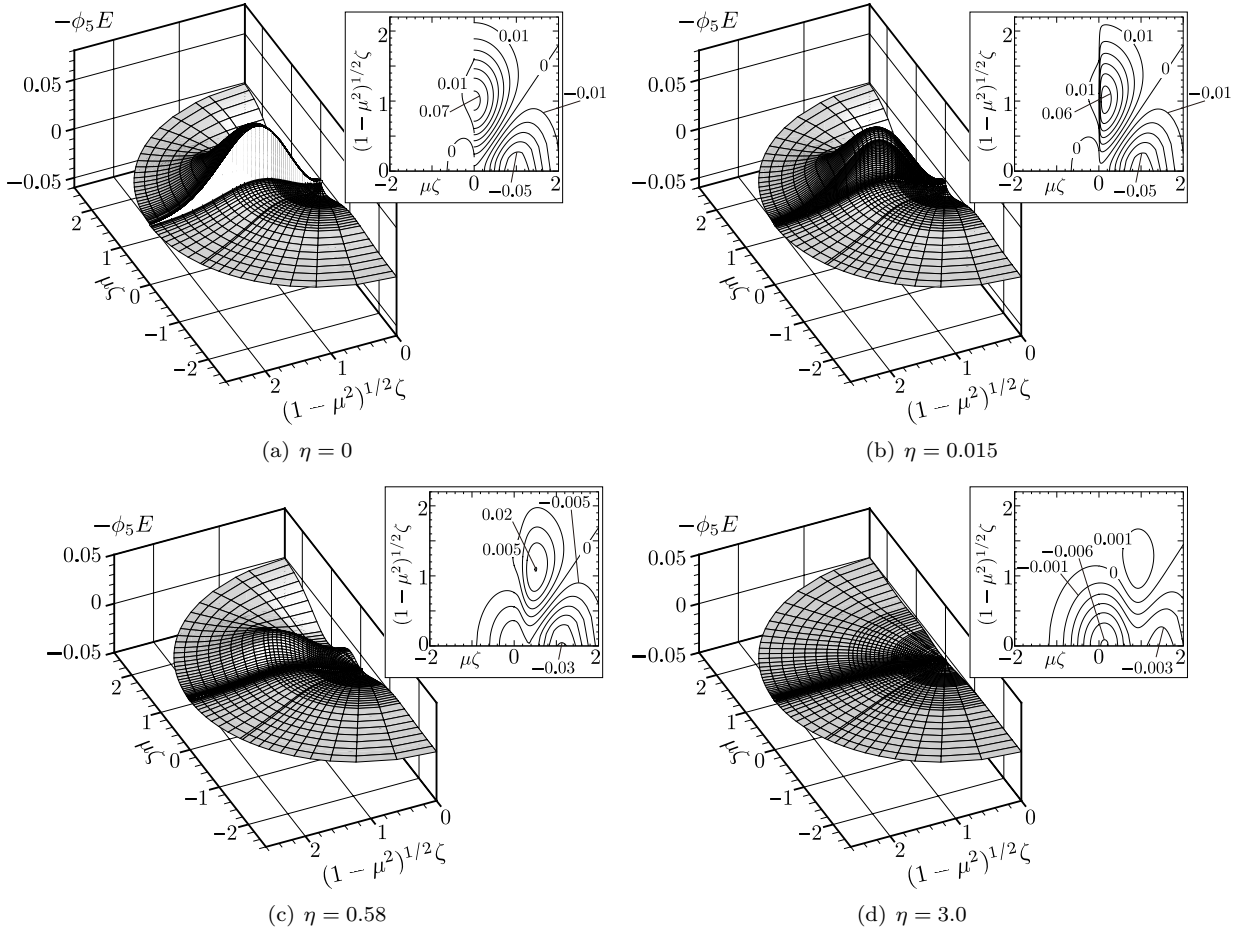


Figure 28: $\phi_5 E$ for the BGK model under the diffuse reflection condition and its contour plots at four spatial points. (a) $\eta = 0$, (b) $\eta = 0.015$, (c) $\eta = 0.58$, and (d) $\eta = 3.0$. In the contour plots, the curves are drawn with the intervals 0.01 in (a) and (b), 0.005 in (c), and 0.001 in (d). The white vertical surface at $\mu\zeta = 0$ in (a) shows the discontinuity.

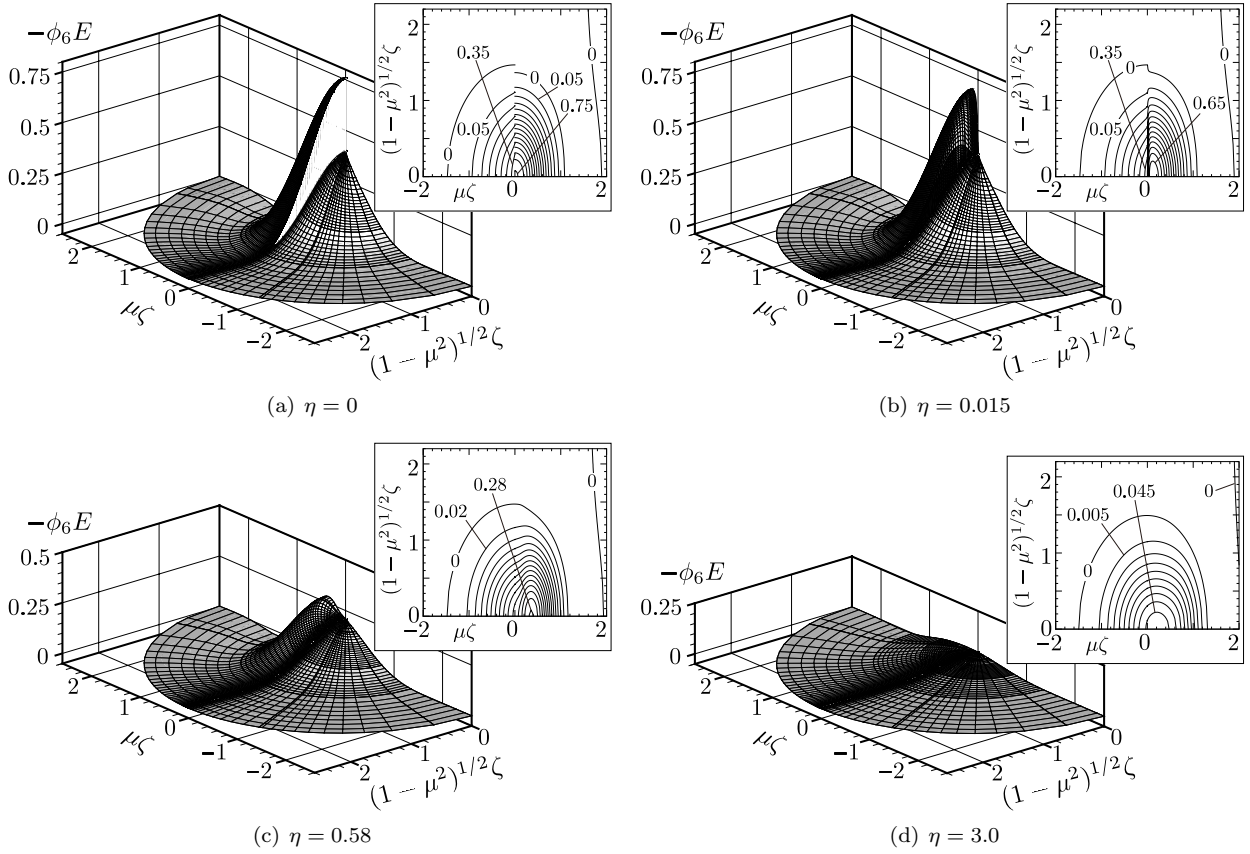


Figure 29: $\phi_6 E$ for the BGK model under the diffuse reflection condition and its contour plots at four spatial points. (a) $\eta = 0$, (b) $\eta = 0.015$, (c) $\eta = 0.58$, and (d) $\eta = 3.0$. In the contour plots, the curves are drawn with the intervals 0.05 in (a) and (b), 0.02 in (c), and 0.005 in (d). The white vertical surface at $\mu\zeta = 0$ in (a) shows the discontinuity.

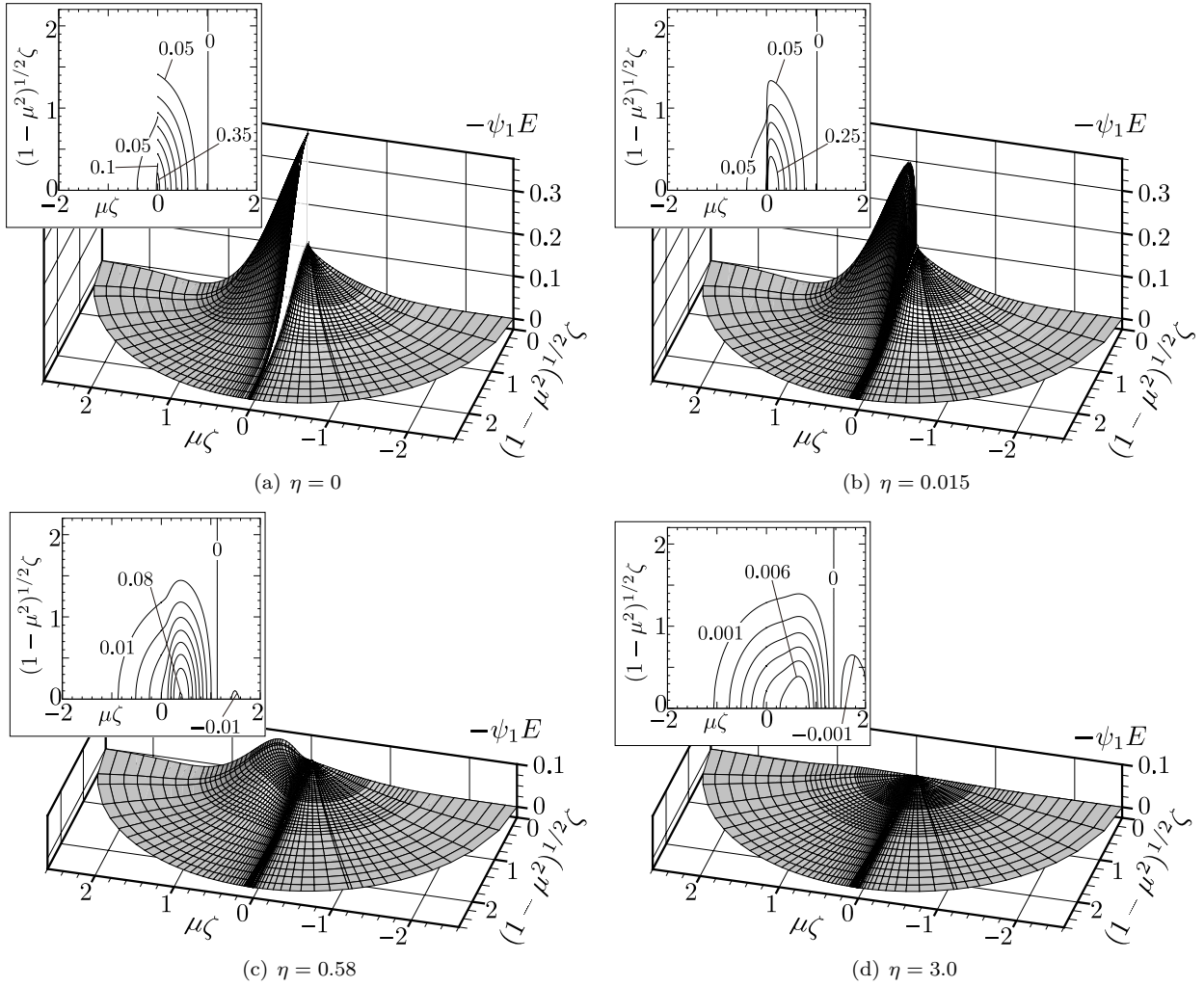


Figure 30: $\psi_1 E$ for the BGK model under the diffuse reflection condition and its contour plots at four spatial points. (a) $\eta = 0$, (b) $\eta = 0.015$, (c) $\eta = 0.58$, and (d) $\eta = 3.0$. In the contour plots, the curves are drawn with the intervals 0.05 in (a) and (b), 0.01 in (c), and 0.001 in (d). The white vertical surface at $\mu\zeta = 0$ in (a) shows the discontinuity.

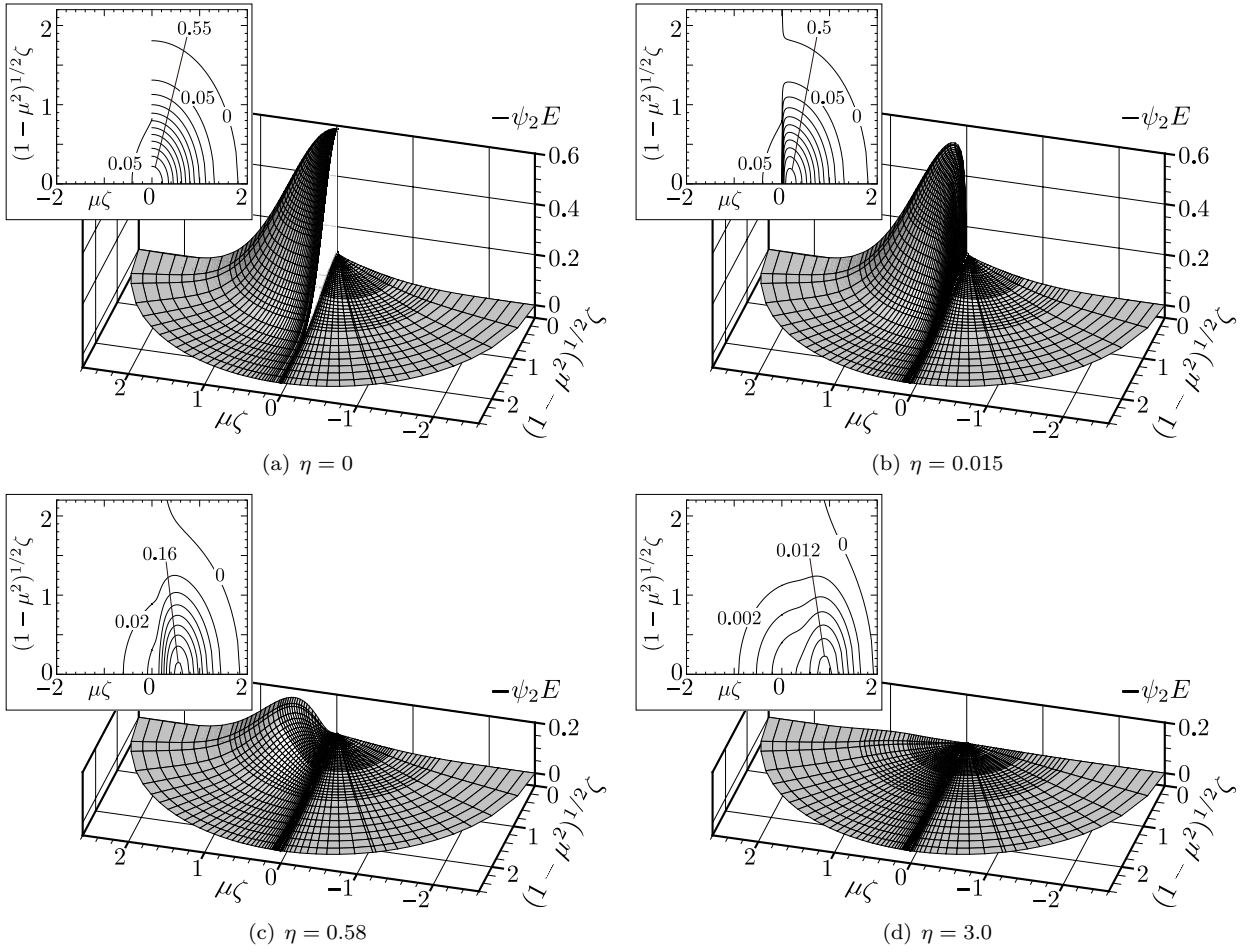


Figure 31: $\psi_2 E$ for the BGK model under the diffuse reflection condition and its contour plots at four spatial points. (a) $\eta = 0$, (b) $\eta = 0.015$, (c) $\eta = 0.58$, and (d) $\eta = 3.0$. In the contour plots, the curves are drawn with the intervals 0.05 in (a) and (b), 0.02 in (c), and 0.002 in (d). The white vertical surface at $\mu\zeta = 0$ in (a) shows the discontinuity.

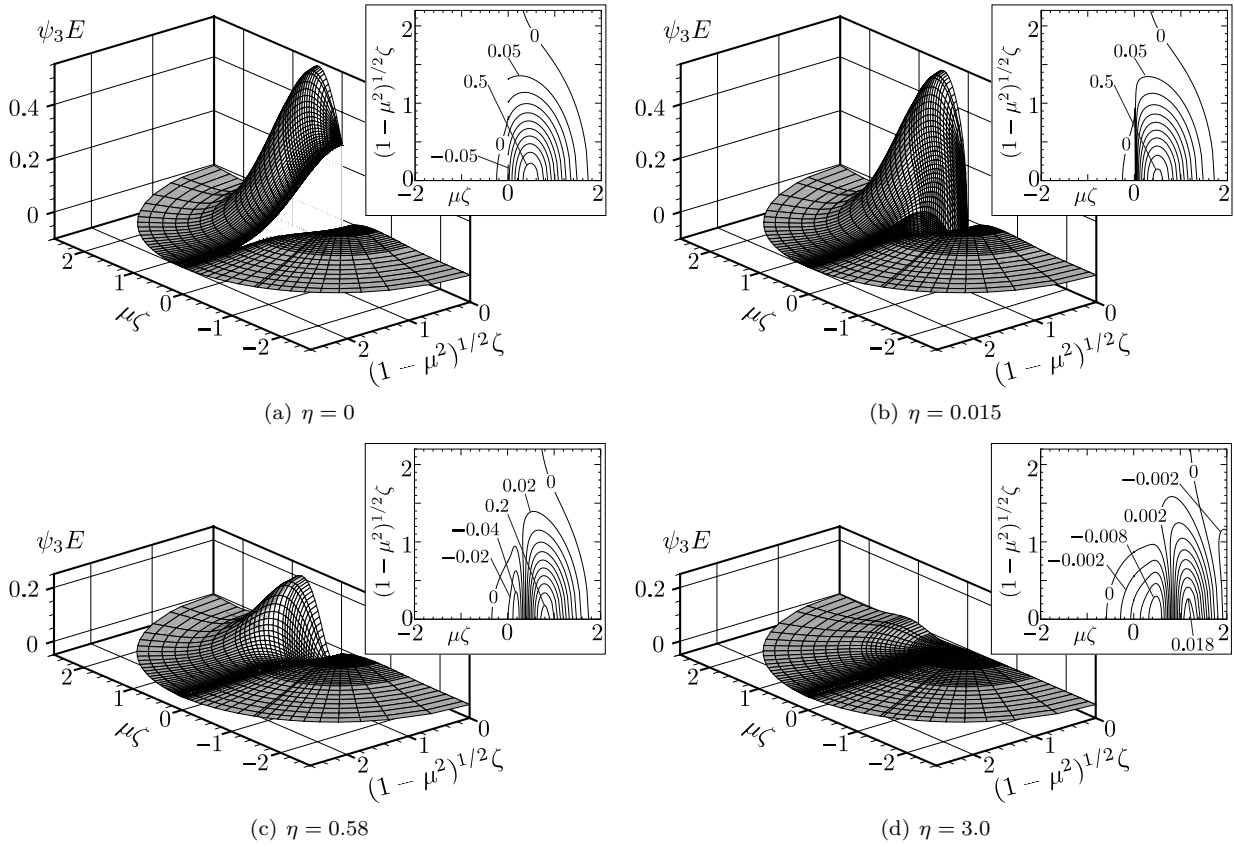


Figure 32: $\psi_3 E$ for the BGK model under the diffuse reflection condition and its contour plots at four spatial points. (a) $\eta = 0$, (b) $\eta = 0.015$, (c) $\eta = 0.58$, and (d) $\eta = 3.0$. In the contour plots, the curves are drawn with the intervals 0.05 in (a) and (b), 0.02 in (c), and 0.002 in (d). The white vertical surface at $\mu\zeta = 0$ in (a) shows the discontinuity.

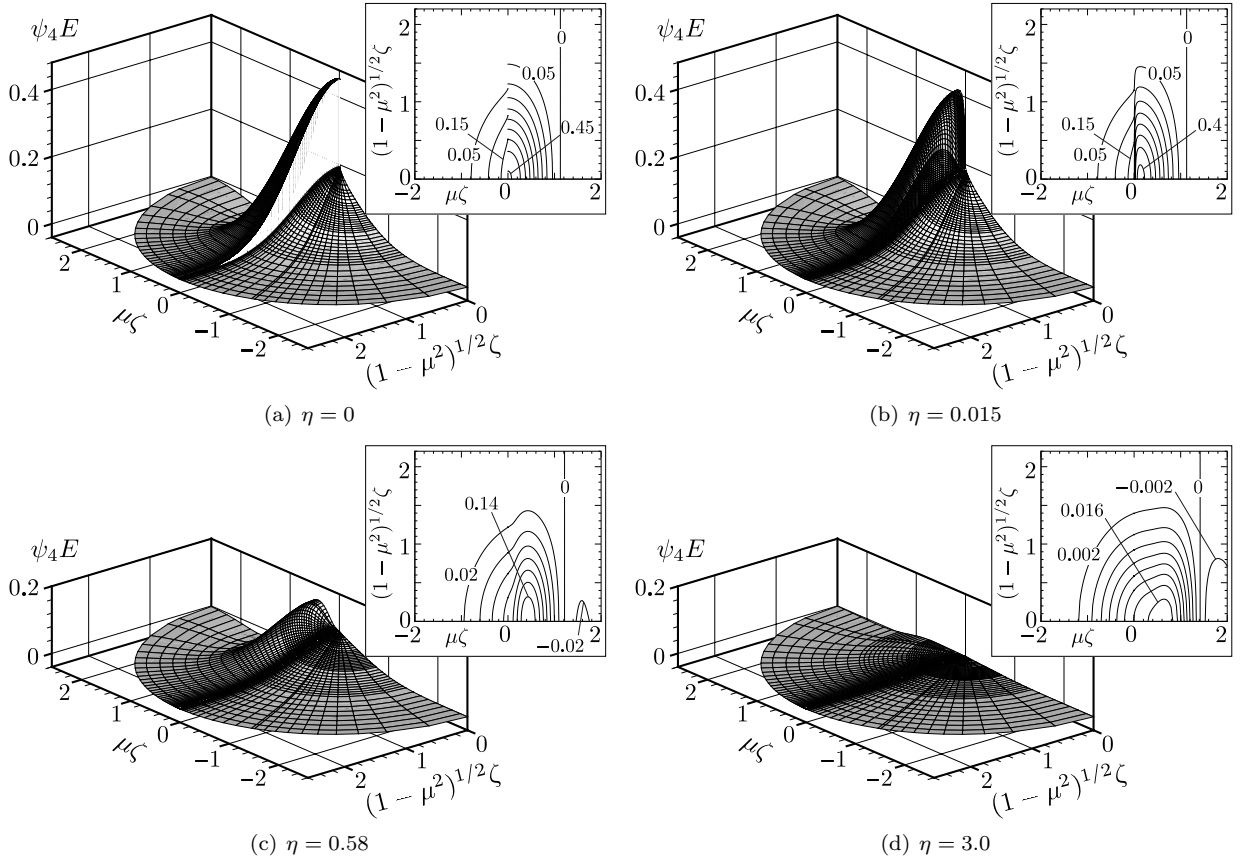


Figure 33: $\psi_4 E$ for the BGK model under the diffuse reflection condition and its contour plots at four spatial points. (a) $\eta = 0$, (b) $\eta = 0.015$, (c) $\eta = 0.58$, and (d) $\eta = 3.0$. In the contour plots, the curves are drawn with the intervals 0.05 in (a) and (b), 0.02 in (c), and 0.002 in (d). The white vertical surface at $\mu\zeta = 0$ in (a) shows the discontinuity.

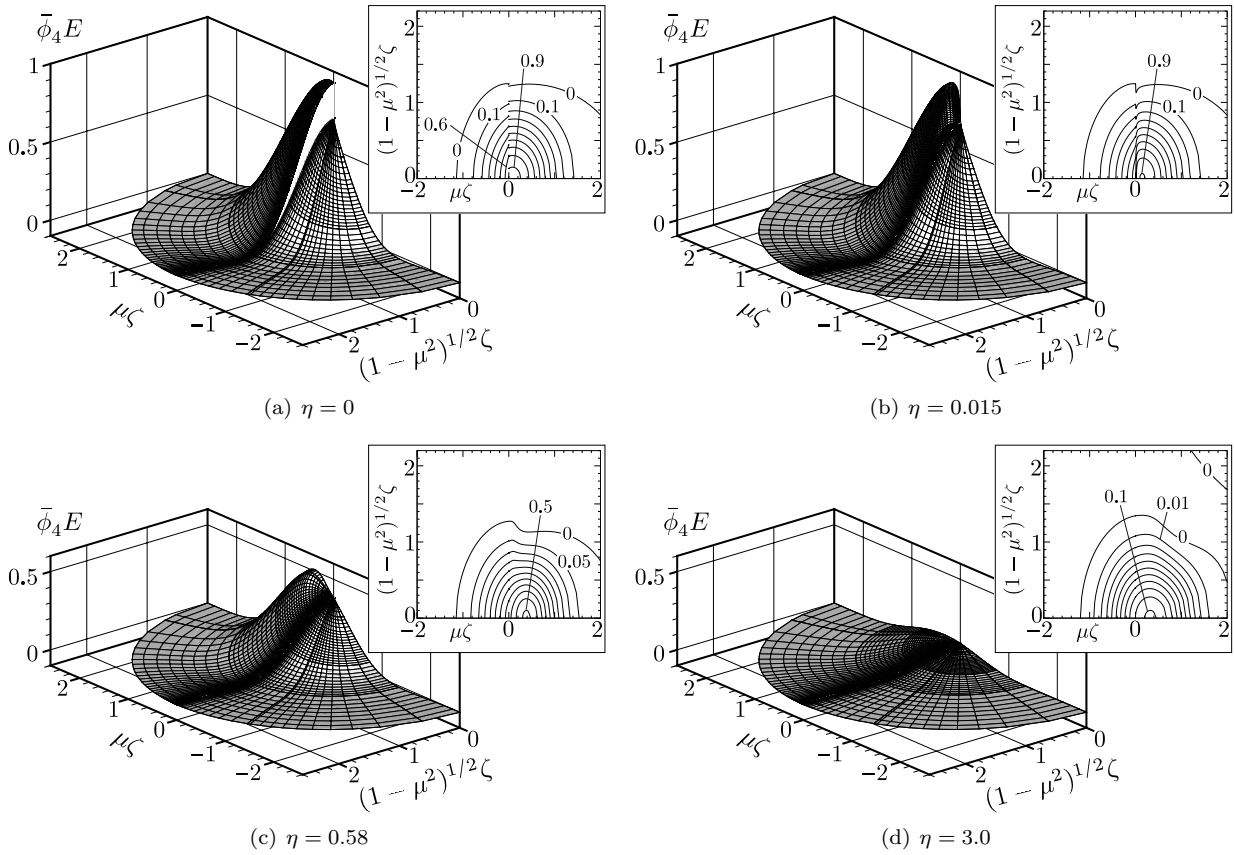


Figure 34: $\bar{\phi}_4 E$ for the BGK model under the diffuse reflection condition and its contour plots at four spatial points. (a) $\eta = 0$, (b) $\eta = 0.015$, (c) $\eta = 0.58$, and (d) $\eta = 3.0$. In the contour plots, the curves are drawn with the intervals 0.1 in (a) and (b), 0.05 in (c), and 0.01 in (d). The white vertical surface at $\mu\zeta = 0$ in (a) shows the discontinuity.

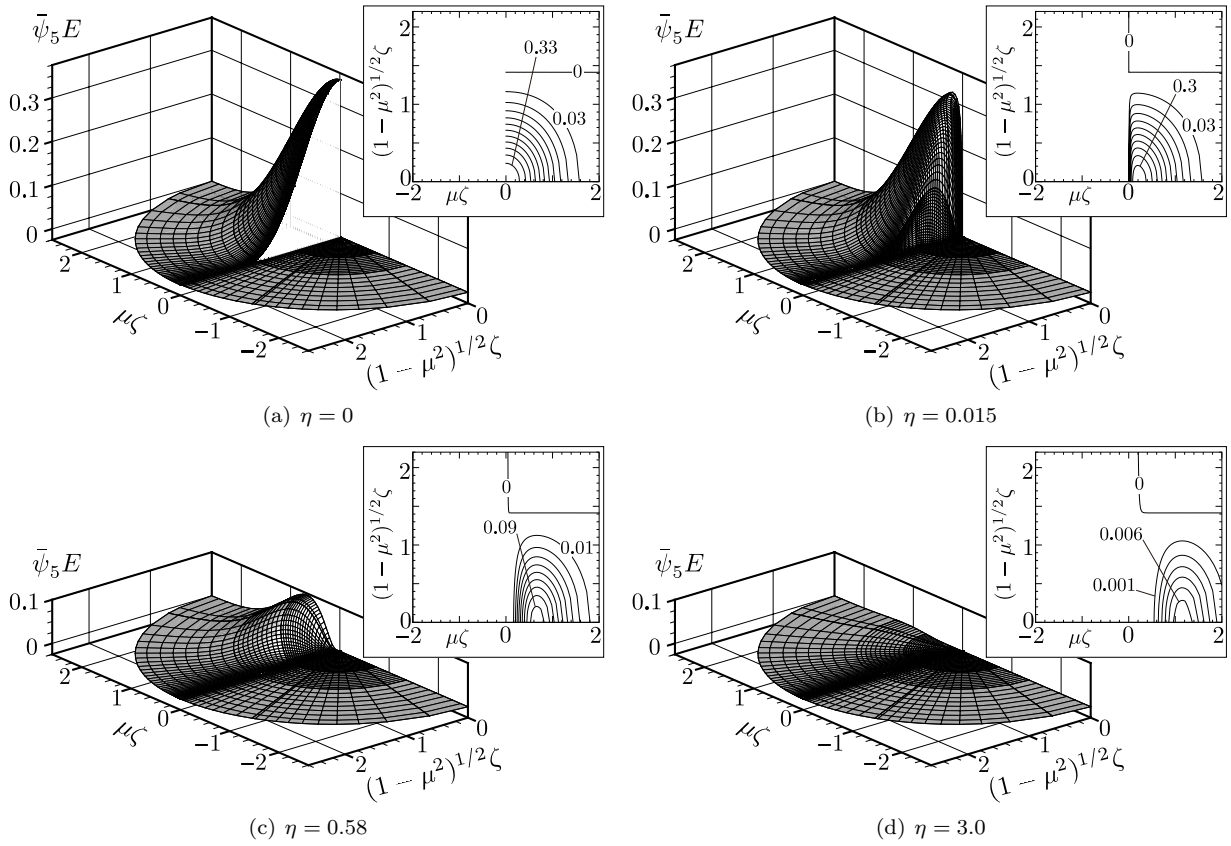


Figure 35: $\bar{\psi}_5 E$ for the BGK model under the diffuse reflection condition and its contour plots at four spatial points. (a) $\eta = 0$, (b) $\eta = 0.015$, (c) $\eta = 0.58$, and (d) $\eta = 3.0$. In the contour plots, the curves are drawn with the intervals 0.03 in (a) and (b), 0.01 in (c), and 0.001 in (d). The white vertical surface at $\mu\zeta = 0$ in (a) shows the discontinuity.

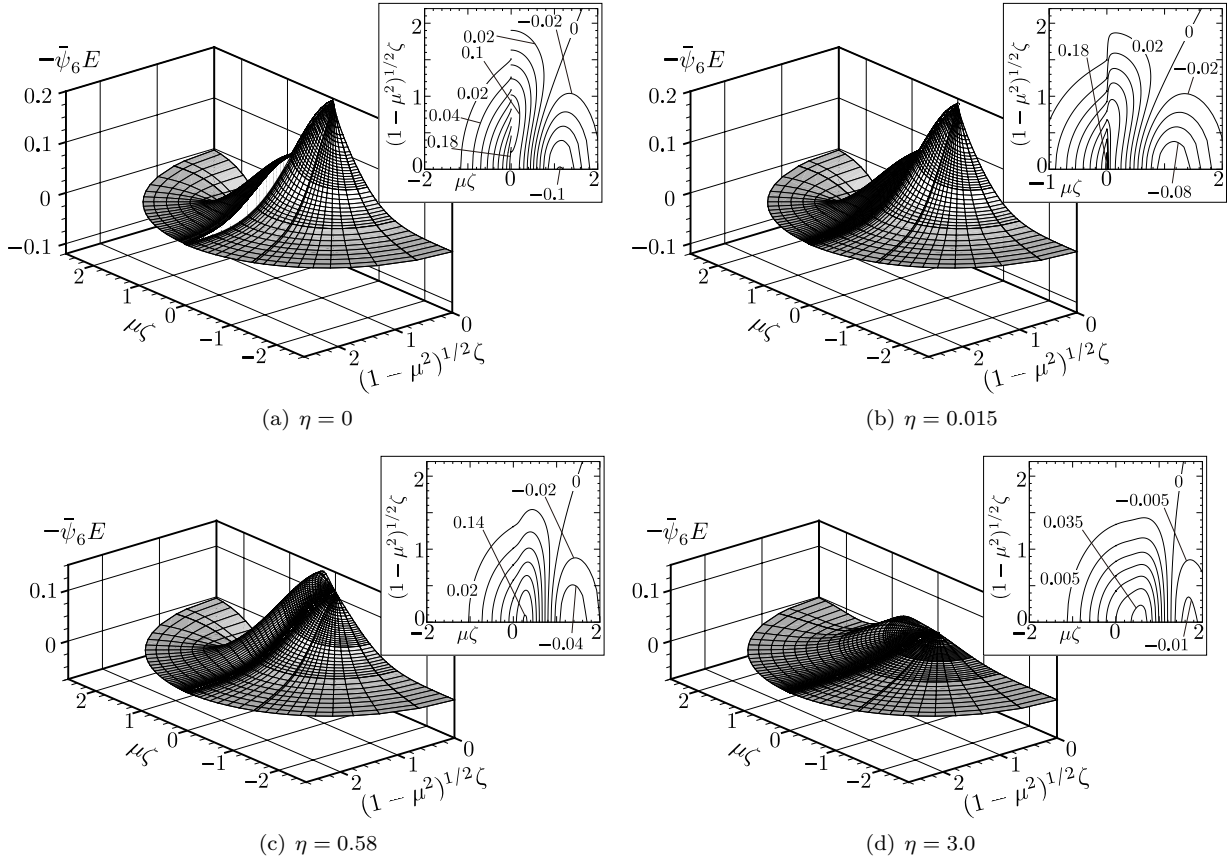
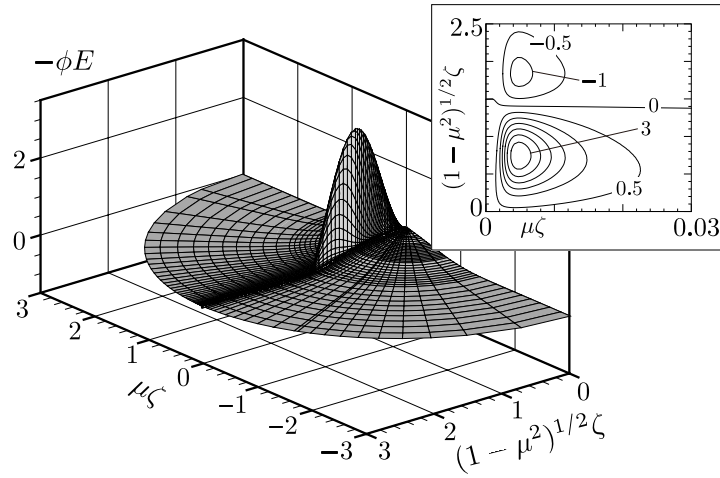
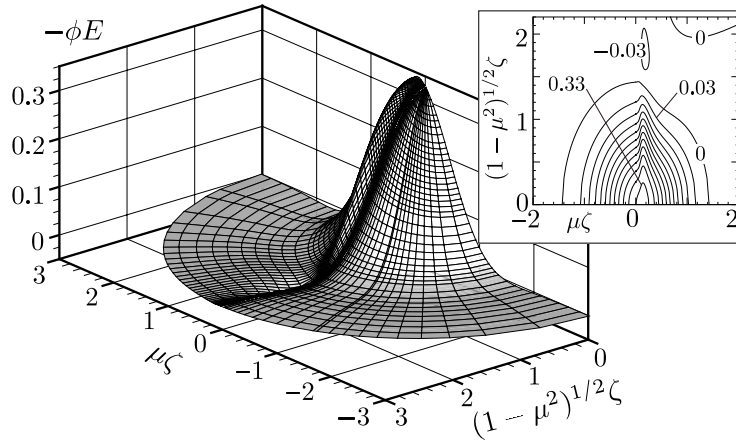


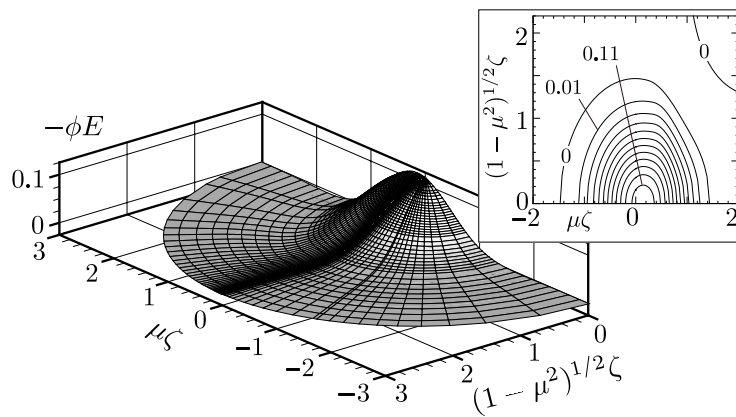
Figure 36: $\bar{\psi}_6 E$ for the BGK model under the diffuse reflection condition and its contour plots at four spatial points. (a) $\eta = 0$, (b) $\eta = 0.015$, (c) $\eta = 0.58$, and (d) $\eta = 3.0$. In the contour plots, the curves are drawn with the intervals 0.02 in (a), (b), and (c), and 0.005 in (d). The white vertical surface at $\mu\zeta = 0$ in (a) shows the discontinuity.



(a) $\eta = 0.015$



(b) $\eta = 0.58$



(c) $\eta = 3.0$

Figure 38: ϕE for the BGK model under the diffuse reflection condition and its contour plots at three spatial points. (a) $\eta = 0.015$, (b) $\eta = 0.58$, and (c) $\eta = 3.0$. In the contour plots, the curves are drawn with the intervals 0.5 in (a), 0.03 in (b), and 0.01 in (c).

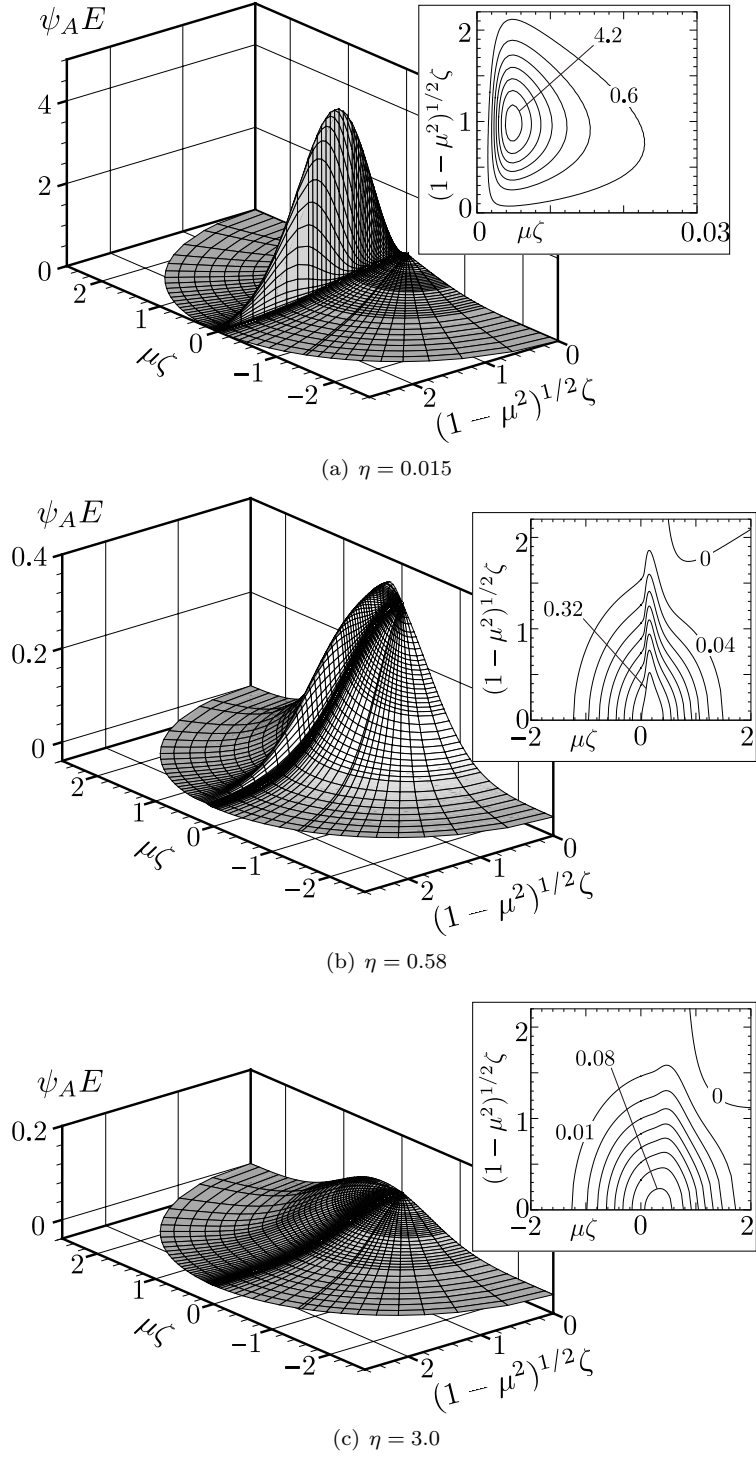
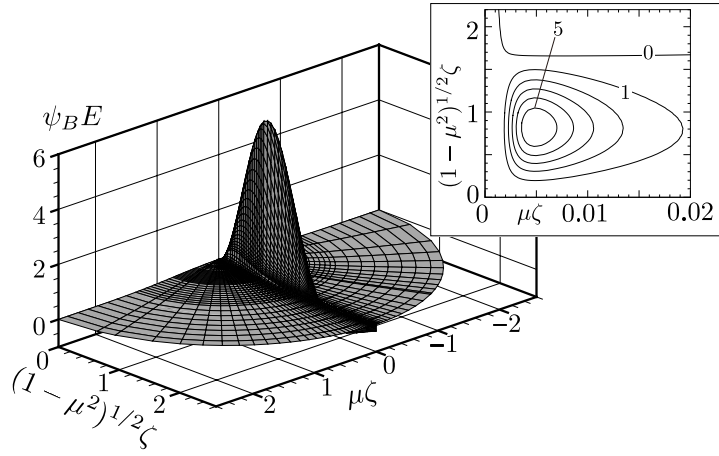
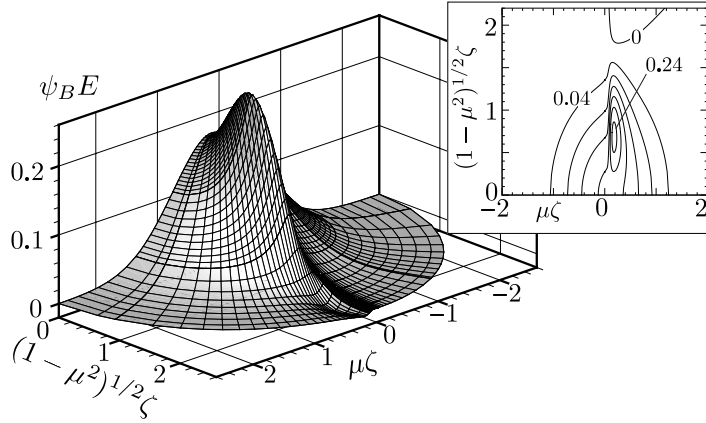


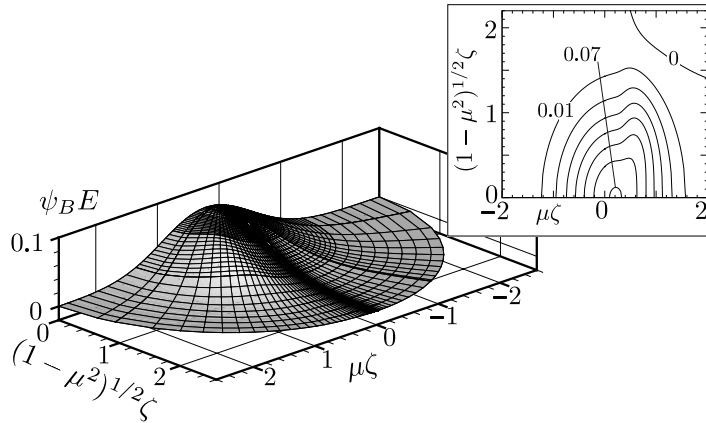
Figure 39: ψ_{AE} for the BGK model under the diffuse reflection condition and its contour plots at three spatial points. (a) $\eta = 0.015$, (b) $\eta = 0.58$, and (c) $\eta = 3.0$. In the contour plots, the curves are drawn with the intervals 0.6 in (a), 0.04 in (b), and 0.01 in (c).



(a) $\eta = 0.015$



(b) $\eta = 0.58$



(c) $\eta = 3.0$

Figure 40: ψ_{BE} for the BGK model under the diffuse reflection condition and its contour plots at three spatial points. (a) $\eta = 0.015$, (b) $\eta = 0.58$, and (c) $\eta = 3.0$. In the contour plots, the curves are drawn with the intervals 1 in (a), 0.04 in (b), and 0.01 in (c).