

3.1. New thermogradient thermomagnetic effects

Variation of in the transverse thermal resistance in the longitudinal magnetic field $\Delta\tau_q C\perp$. This new effect can be named the transverse Maggi - Righi - Leduc effect in the magnetic field

Table 1.17. *Newly discovered effects.*

Medium			
Irregular	Quasi-Onsager	Gyrotropic	Isotropic
New thermogradient thermomagnetic effects			
$\Delta\tau_q^- C\perp$ $\Delta\tau_q^- P\perp G$ $\Delta\tau_q^+ C\perp$ $\Delta\tau_q^+ P\perp H$ $\Delta\tau_q^+ P\perp G$	$\Delta\tau_q^+ P\perp H$ $\Delta\tau_q^+ P\parallel G$ $\Delta\tau_j^+ C\perp$ $\Delta\tau_j^- P\parallel$ $\Delta\tau_j^- P\parallel G$	$\Delta\tau_j^- \parallel, \Delta\tau_j^- C\perp$ $\Delta\tau_j^- P\perp G, \Delta\tau_j^+ C\perp$ $\Delta\tau_j^+ P\perp H, \Delta\tau_j^+ P\perp G$ $\Delta\tau_j^- C\parallel, \Delta\tau_j^- C\perp$	—
New thermogradient galvanothermomagnetic effects			
$\Delta\tau_q^- C\perp$ $\Delta\tau_q^- P\perp G$ $\Delta\tau_q^+ C\perp$ $\Delta\tau_q^+ P\perp H$ $\Delta\tau_q^+ P\perp G$	$\Delta\tau_q^+ P\perp H$ $\Delta\tau_q^+ P\parallel G$ $\Delta\tau_j^+ C\perp$ $\Delta\tau_j^- P\parallel$ $\Delta\tau_j^- P\parallel G$	$\Delta\tau_j^- \parallel, \Delta\tau_j^- C\perp$ $\Delta\tau_j^- P\perp G, \Delta\tau_j^+ C\perp$ $\Delta\tau_j^+ P\perp H, \Delta\tau_j^+ P\perp G$ $\Delta\tau_j^- C\parallel, \Delta\tau_j^- C\perp$	—
New surface caloric effects			
$\Delta K_j P\parallel$ $\Delta K_j P\parallel G$ $\Delta K_j C\parallel$ $\Delta K_j C\perp$	$\Delta K_j^- C\parallel,$ $\Delta K_j^- P\parallel$	$\Delta K_j^- C\parallel, \Delta K_j^- P\parallel$ $\Delta K_j^- C\perp, \Delta K_j^- P\parallel G$ $\Delta K_j^+ \perp, \Delta K_j P\perp H$ $\Delta K_j P\parallel G, \Delta K_j C\parallel$	—
New volumetric caloric effects (see Table 1.15)			
$T\text{Dev}(\hat{\alpha}^{s-}): \text{Defj}, -T\mathbf{j}\text{Div}_T \hat{\alpha}^{s+}, -T\mathbf{j} \frac{\partial}{\partial T} (\hat{\alpha}^{s-} - 2\hat{\alpha}^{s-})\boldsymbol{\tau}$			—
Can originate in all the media		$-T\mathbf{N}\text{rotj}, -T\mathbf{j}\text{rotN}$	