

1.1. INTRODUCTION TO THE PROPERTIES OF TENSORS

p	pressure
u_i	components of the displacement vector
S_{ij}	components of the strain tensor
S_α	components of the strain Voigt matrix
T_{ij}	components of the stress tensor
T_α	components of the stress Voigt matrix
s_{ijkl}	elastic compliances
$s_{\alpha\beta}$	reduced elastic compliances
$(s_{ijkl})^\sigma$	adiabatic elastic compliances
c_{ijkl}	elastic stiffnesses
$c_{\alpha\beta}$	reduced elastic stiffnesses
ν	Poisson's ratio
E	Young's modulus
Θ	temperature
σ	entropy
α_{ij}	thermal expansion
λ_{ij}	temperature-stress constant
\mathcal{U}	internal energy
\mathcal{G}	Gibbs free energy
$C^{E,T}$	specific heat at constant stress and applied electric field
E	electric field
D	electric displacement
H	magnetic field
B	magnetic induction
ϵ_0	permittivity of vacuum
ϵ	dielectric constant
ϵ_{ij}	dielectric tensor
$(\epsilon_{ij})^\sigma$	adiabatic dielectric tensor
χ_e	dielectric susceptibility
η_{ij}	dielectric impermeability
p_i	pyroelectric tensor
d_{ijk}	piezoelectric tensor
$d_{i\alpha}$	reduced piezoelectric tensor
$d_{\alpha i}$	reduced inverse piezoelectric tensor
$(d_{ijk})^\sigma$	adiabatic piezoelectric tensor
e_{ijk}	piezoelectric tensor at constant strain
Q_{ijkl}	electrostriction tensor
$Q_{\alpha\beta}$	reduced electrostriction tensor
π_{ijkl}	piezo-optic tensor
$\pi_{\alpha\beta}$	reduced piezo-optic tensor
p_{ijkl}	elasto-optic tensor
$p_{\alpha\beta}$	reduced elasto-optic tensor
$R_{H\ ij k}$	Hall constant

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