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ABBREVIATIONS AND SYMBOLS

\bar{c}_i	= mean thermal speed of ions
d_p	= diameter of particle
d_w	= diameter of wire
d_t	= diameter of tube
e	= charge of electron
n	= number of charge
$n_F(t)$	= number of charges during time by field charging
$n_D(t)$	= number of charges during time by diffusion charging
n_t	= total number of charges
t	= time
w	= particle migration velocity
A_c	= area of cylinder or collection area
AC	= Alternative current
C_{in}	= concentrations of particles at the inlet
C_{ext}	= concentrations of particles at the exit
C_c	= Cunningham correction factor
Cvt	= dust-loading parameter
DC	= Direct current
E	= field strength inside a cylinder tube
ESP	= Electrostatic precipitator
ESPs	= Electrostatic precipitators
E_b	= Electric field required to initiate corona discharge
HV	= High voltage
HEPA	= High efficiency particle accumulate
I	= corona current
K_E	= electrostatic constant
K	= Boltzmann constant
LPC	= Laser particle counter
MMAD	= Mass median aerodynamic diameter
MMADs	= Mass median aerodynamic diameters

ABBREVIATIONS AND SYMBOLS (Continued)

N_i	= concentration of ions
PVC	= Polyvinylchloride
PSL	= Polystyrene latex
Q	= volumetric gas flow
R_w	= radius of wire
R_c	= radius of cylinder
SCA	= Specific collection area
T	= absolute temperature
U	= velocity
V_{TE}	= electric terminal setting velocity
V_w	= the applied voltage on wire
V_i	= initial voltage of corona discharge
VAC	= alternative current voltage
Z_i	= mobility of the ions
η	= collection efficiency
ε	= dielectric constant of particle
ΔP	= pressure drop
ΔW	= the algebraic difference in voltage between the wire and the
tube	