

ABBREVIATIONS

Term	Description
DISO	Double-input, single-out
FE	Finite element
FL CONTROLLER	Fuzzy logic controller
LQR CONTROLLER	Linear-quadratic-regulator controller
MIMO	Multi input multi output
MOM	Middle of Maximum
MV	manipulated variable
NB	Negative big
NM	Negative medium
NS	Negative small
PB	Positive big
PDVF	Polyvinylidene fluoride
PI	Performance index
PID CONTROLLER	Proportional -integral-derivative controller
PM	Positive medium
POF	Proportional output feedback
PS	Positive small
PZT	Lead zirconate titanate patches
RTOS	real time operation system
rlocus	root locus
SISO	Single input single output
SVFB	State-variable feedback
ZO	Zero