LIST OF SYMBOLS

1. Abbreviations

γ	Gamma phase (austenitic matrix)
γ'	Gamma prime precipitate ($Ni_3(Al, Ti)$)
γ''	Gamma double prime precipitate (Ni_3Nb)
δ	Delta phase (Ni_3Nb)
Cr	Chromium
Ni	Nickel
Fe	Iron
O	Oxygen
Na	Sodium
Cl	Chlorine
S	Sulfur
V	Vanadium
NaCl	Sodium chloride
Na_2SO_4	Sodium sulfate
V_2O_5	Vanadium pentaoxide
$NaVO_3$	Sodium met vanadate
wt.%	Weight percentage
t	time
k_p	Parabolic rate constant
σ_a	Stress amplitude
σ_m	Mean stress
R	Stress Ratio

N_f	Number of cycles to failure
σ_f'	Fatigue strength coefficient
b	Fatigue strength exponent
ν	Frequency
µm	micron

2. Acronyms

IN718	INCONEL 718
PA	Peak aged
1S	100 NaCl (wt.%)
2SM	60 Na_2SO_4 + 40 V_2O_5 (wt.%)
3SM	75 Na_2SO_4 + 15 NaCl + 10 V_2O_5 (wt.%)
LTHC	Low Temperature Hot Corrosion
HTHC	High Temperature Hot Corrosion
LCF	Low Cycle Fatigue
HCF	High Cycle Fatigue
UTS	Ultimate Tensile Strength
YS	Yield Stress/Yield Strength
MPa	Mega pascal
SEM	Scanning Electron Microscopy
EDS	Energy Dispersive X-ray Spectroscopy
BSE	Back Scattered Electron
EPMA	Electron Probe Micro Analysis
XRD	X-ray Diffraction
TEM	Transmission Electron Microscopy
USP	Ultrasonic Shot Peening