crystallite_integrateStress

Fg_new = crystallite_subF
Fp_current = crystallite_subFp0
Tstar_v = crystallite_Tstar_v
Lpguess_old = crystallite_Lp
Lpguess = crystallite_Lp
crystallite_integrateStress = .false.

invFp_current = math_inv3x3(Fp_current)

invFp_current == 0.0

.true. | .false.

return | ∅

A = invFp_current^T * Fg_new^T * Fg_new * invFp_current

constitutive_microstructure

C = math_Mandel66to3333(constitutive_homogenizedC( ))

NiterationStress = 0
leapfrog = 1.0
maxleap = 1024.0
jacoCounter = 0

LP LOOP (see crystallite_integrateStress_LpLoop)

invFp_new = invFp_current * B
invFp_new = invFp_new / math_det3x3(invFp_new)^(1.0/3.0)

[Fp_new,det,error] = math_invert3x3(invFp_new)

error

.true. | .false.

INVERSION FAILED: return | ∅

Fe_new = Fg_new * invFp_new
Tstar_v = Tstar_v + p_hydro

crystallite_P = Fe_new * Tstar_v * invFp_new^T
crystallite_Lp = Lpguess
crystallite_Tstar_v = Tstar_v
crystallite_Fp = Fp_new
crystallite_Fe = Fe_new
crystallite_integrateStress = .true.