## BOOK ERRATA

p31 1 subscript wrong  $\varepsilon_{kl} = a_{ki}a_{lj}\varepsilon_{ij}$  (2.22)

## p92 Add parentheses round $a^3$

 $\Omega$  is the crack density (= (1/V) < a<sup>3</sup>>) and v is the Poisson's ratio of the microcracked

p117 = sign missing 
$$\varepsilon_{rr} = \frac{u_r}{r}; \ \varepsilon_{\theta\theta} = \frac{u_{\theta}}{r\theta} + \frac{u_r}{r}; \ \varepsilon_{zz} = \frac{u_z}{z};$$
  
 $2\varepsilon_{r\theta} = \frac{u_{\theta}}{r} - \frac{u_r}{r} + \frac{u_r}{r\theta}; \ 2\varepsilon_{\theta z} = \frac{u_z}{r\theta} + \frac{u_{\theta}}{z}; \ 2\varepsilon_{rz} = \frac{u_r}{z} + \frac{u_z}{r}$  (4.26)

p118 outside parentheses 
$$\frac{2}{r^2} + \frac{1}{r} + \frac{1}{r} + \frac{1}{r^2} + \frac{2}{\theta^2} + \frac{2}{\theta^2} = 0$$
 (4.28)

P119 delete minus sign 
$$\sigma_{\theta\theta} = \frac{P_a a^2 (r^2 + b^2)}{r^2 (b^2 - a^2)}$$
 (4.35)

P120 Fig 4.16  $r_F$  should be 2  $r_F$ 

P121 change + to - 
$$(u_r' - u_r) = \frac{P(1 - v_f)r_f}{E_f} + \frac{P(1 + v_m)r_f}{E_m}$$
 (4.38)

p134 remove

$$\frac{\mathrm{d}\gamma}{\mathrm{d}t} = \alpha\tau \tag{5.1}$$

p141. 
$$M = \frac{4 L\eta \omega a^2 b^2}{b^2 - a^2}; C = \frac{\omega b^2}{b^2 - a^2}$$
(5.18)

p173 For slip on  $\{100\}$  planes (a to b), the distance between like ions is <u>decreased</u> and between opposite ions, it is <u>increased</u>. For slip on  $\{110\}$  (<u>c to d</u>), the distance between like ions is also <u>decreased</u> but opposite ions are brought closer together, decreasing the overall electrostatic interaction energy.

p 213. Add 
$$U_0$$
  $U = \frac{-c^2 \sigma^2}{E} + 4c\gamma + U_0$  (8.8)

p215 2 and 3 switched 
$$W_{\rm L} = 0; \quad U_{\rm E} = \frac{E\delta^2 h^3}{8c^3}$$
 (8.12)

p216 2 and 3 switched 
$$c_0 = \frac{3E\delta^2 h^3}{16\gamma}^{1/4}$$
 (8.13)

p 281 2 should be superscript Thermodynamic surface energy,  $J/m^2$ :

p 281. Insert text. In addition, determine the stresses ( $\sigma_{11}$ ,  $\sigma_{12}$  and  $\sigma_{22}$ ) in the crack plane ( $\theta = 0$ ) at distances of 1 µm and 10 µm from the crack tip (see problem 4.6).

p295 remove = sign 
$$\ln \frac{1}{1 - F} = \frac{S_{I}}{S_{0}^{*}}^{m}$$
 (9.14)

p 296 m/n–2 is superscript 
$$\ln R_{ij}^{\mathsf{F}} = \ln R_{ij} \frac{\sigma_{ij}^2 t_f}{B}$$
 (9.17)

p325

 $HEXAGONAL = \text{should be +, = is missing and = should be negative in first two equations} \\ s_{11} + s_{12} = \frac{c_{33}}{c}; \quad s_{11} - s_{12} = \frac{1}{c_{11} - c_{12}}; \quad s_{13} = \frac{-c_{13}}{c}; \quad s_{33} = \frac{c_{11} + c_{12}}{c}; \quad s_{44} = \frac{1}{c_{44}}$ 

where  $c = c_{33}(c_{11} + c_{12}) - 2c_{13}^2$ 

p326 TETRAGONAL Last term should be  $2s_{25}a_1a_3(3a_2^2 - a_1^2)$ 

MONOCLINIC 9<sup>TH</sup> term should be  $2s_{35}a_1a_3^3$