ERRATA

THERMAL RADIATION HEAT TRANSFER

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Page Correction

47	Eq. (1.85)	The upper limit of the integral should be λ , not ∞ .
65	Figure 2.7	Interchange $d\Omega_i$ and $d\Omega$ in parts (a) and (b).
		Figure caption should now read:
		FIGURE 2.7: Equivalent ways of showing energy from dA_i that is incident on dA. (a) Incidence within solid angle $d\Omega$ having origin at dA _i ; incidence within solid angle $d\Omega_i$ having origin at dA.
158	Figure 4.2	The two vertical lines labelled $l\cos\beta$ should be labelled $l\sin\beta$
174	Example 4.13	First equation should read:
		$A_1F_{1-2} + A_1F_{1-3} = A_1; A_2F_{2-1} + A_2F_{2-3} = A_2; A_3F_{3-1} + A_3F_{3-2} = A_3$
378	Eq. (8.82)	Should read:
		$\rho(\theta_{i}) = \frac{\rho_{\perp}(\theta_{i}) + \rho_{\parallel}(\theta_{i})}{2} = \frac{1}{2} \left[\frac{\tan^{2}(\theta_{i} - \chi)}{\tan^{2}(\theta_{i} + \chi)} + \frac{\sin^{2}(\theta_{i} - \chi)}{\sin^{2}(\theta_{i} + \chi)} \right]$
		$=\frac{1}{2}\frac{\sin^{2}(\theta_{i}-\chi)}{\sin^{2}(\theta_{i}+\chi)}\left[1+\frac{\cos^{2}(\theta_{i}+\chi)}{\cos^{2}(\theta_{i}-\chi)}\right]$
384	Eq. (8.111)	Should read:

$$\epsilon_{\rm II} = {\rm Im}(\chi_{\rm e}) = \frac{\omega_{\rm p}^2 \zeta \omega}{\left(\omega_0^2 - \omega^2\right)^2 + \zeta^2 \omega^2}$$

386	Eq. (8.118)	The zeta (ζ) should be tau (τ).
415	Example 9.1	The first line of the second paragraph should read:
		Relations from the exponential wide-band model for α , β , and ω , and the transition (-1, 0, 1) are used. (See the footnote for the 9.4 μ m band in Table 9.2).
470	First line of text:	Replace $\pm \infty$ with ± 1 .
644	Section 14.2.2	Replace all β^{k} with \hat{u}^{k}
668	In Figure 14.11,	In the trapezoid for Ω , switch the "yes" and "no" labels on the output arrows.

in the bottom trapezoid, replace " $\mu > 1$?" with " $\mu > 0$?".

Replace Figure 14.12 with the figure below:



686 Line after Eq. (15.5): replace $\vartheta(0) = 0$ with $\vartheta(0) = 1$.

890 *Source*: should read Tiesinga et al., NIST, 2020.

On-Line Appendix P

Problem P.7.8: Solution should be 4.47 hr.