Errata

Lyu, Ling-Hsiao (2014), *Elementary Space Plasma Physics Second Edition*, Airiti Press, Taiwan, R.O.C.

2017-01-07

page(s)	Chaper	original text	correction(s)
66, 68, 79	5	Figures 5.1, 5.2, and 5.4	Correct the typos in Figures 5.1, 5.2, and 5.4.
87, 90, 91, 94	6	Eq. (6.14) and the discussions associated with Eq. (6.14)	Correct the typos in Eq. (6.14) and the discussions associated with Eq. (6.14).

2016-08-10

page(s)	Chaper	original text	correction(s)
15	1	The example and Exercise 1.4 in Section 1.8 on page 15	Modify the example and Exercise 1.4 given in Section 1.8 on page 15
49-95	5,6	-	Reformat all the equations based on a new version of Mathtype

2015-10-05

page(s)	Chaper	original text	correction(s)
15-16	1	Section 1.8 and Exercise 1.4	Section 1.8 and Exercise 1.4

2015-04-01

page(s)	Chaper	original text	correction(s)
77	5	Typos in the equations of the cut-off frequencies ω_L and ω_R.	Correct the typos by removing the ω_L and ω_R on the right-hand-side of the equations.

2015-03-24

page(s)	Chaper	original text	correction(s)
132	9	Original distribution function shown in Figure 9.3 is inconsistent with the integration path shown in Figure 9.4.	Replace the distribution function in Figure 9.3 by a bump-on-tail distribution.

136	9	Blank	Add the answer to Exercise 9.1.

2015-03-16

page(s)	**Chaper**	**original text**	**correction(s)**
120	9	"The paragraph after Equation (9.23)."	Rewrite "The paragraph after Equation (9.23)."
127	9	$\omega_i << \omega_r$	$\lvert\omega_i\rvert << \omega_r$

2014-12-24

page(s)	**Chaper**	**original text**	**correction(s)**
85	6	share Alfvén mode	shear-Alfvén mode
89	6	share-Alfvén wave	shear-Alfvén wave
200	Index	share Alfvén mode	shear-Alfvén mode

Lyu, Ling-Hsiao (2010), Elementary Space Plasma Physics, National Central University Press & Airiti Press, Chung-li, Taiwan, R.O.C.

2014-09-22

page(s)	Chaper	original text	correction(s)
7	1	$1\,\text{Tasla} = 10^4\,\text{Gauss}$ $1\,\text{Gauss} = 10^5\,\gamma$ $1\,\text{Tasla} = 10^9\,\gamma$ $1\,\text{Tasla} = 10^9\,\text{nT}$ $1\gamma = 1\,\text{nT}$	$1\,\text{Tesla} = 10^4\,\text{Gauss}$ $1\,\text{Gauss} = 10^5\,\gamma$ $1\,\text{Tesla} = 10^9\,\gamma$ $1\,\text{Tesla} = 10^9\,\text{nT}$ $1\gamma = 1\,\text{nT}$

2014-09-15

page(s)	Chaper	original text	correction(s)
3	1	Additional information on these units can be found in the Dimensions and Units section of *NRL Plasma Formulary* (on page 10). URL address of the NRL Plasma Formulary web site is http://wwwppd.nrl.navy.mil/nrlformulary	Additional information on these units can be found in the Dimensions and Units section of *NRL Plasma Formulary*. (URL: http://www.nrl.navy.mil/ppd/content/nrl-plasma-formulary, cited on 2014-09-15)

2013-05-28

page(s)	Chaper	original text	correction(s)
93	6	In the original text, the signs in equation (6.30) on page 93 are somehow mixed with information on fast-/slow-modes and the propagation angle of phase velocity at $0^+/0^-$ or $90^+/90^-$ degrees w.r.t. the ambient magnetic field. The equation (6.30) and following equations need to be rewritten.	Rewrite the equations on Page 93 to make sure that there is no mixed information on the plus and minus signs.

2013-03-04

page(s)	Chaper	original text	correction(s)
45	3	In Table 3.3 $\nabla \cdot \mathbf{E} = 0$	In Table 3.3 $\nabla \cdot \mathbf{E} \to 0$
78	5	Equation between (5.50b) and (5.50c): $C_{S0}^2 \equiv \frac{\gamma_i T_{i0} + \gamma_e T_{e0}}{m_i}$	Equation between (5.50b) and (5.50c): $C_{S0}^2 \equiv \frac{\gamma_i k_B T_{i0} + \gamma_e k_B T_{e0}}{m_i}$
86	6	In the left column of Table 6.1 $\nabla \cdot \mathbf{E} = 0$	In the left column of Table 6.1 $\nabla \cdot \mathbf{E} \to 0$
86	6	Equation (6.6) in Table 6.1	Equation (6.6) in Table 6.1

		$i\mathbf{k}\cdot\mathbf{E}=0$	$i\mathbf{k}\cdot\mathbf{E}\rightarrow 0$
90-95	6	No numbered subsections in Section 6.2.2 and Section 6.2.3. An expression and a brief derivation with typos were given in Section 6.2.3.	Add numbered subsections in Section 6.2.2 and Section 6.2.3. Rewrite the text in section 6.2.3.2. The group velocity discussed in the revised text is more than an expression. A derivation is given and two special cases are discussed in great detail.

2012-10-19

page(s)	**Chaper**	**original text**	**correction(s)**
37	3	in Answer to Exercise 3.3. The last line: $\nabla\cdot(...)-\frac{1}{c^2}\frac{\partial}{\partial t}(\frac{\mathbf{E}\times\mathbf{B}}{\mu_0})$	in Answer to Exercise 3.3. The last line: $=\nabla\cdot(...)-\frac{1}{c^2}\frac{\partial}{\partial t}(\frac{\mathbf{E}\times\mathbf{B}}{\mu_0})$

2012-07-07

page(s)	**Chaper**	**original text**	**correction(s)**
41	3	... in q convective-time-derivative	... in a convective-time-derivative

2012-05-02

page(s)	**Chaper**	**original text**	**correction(s)**
9	1	(1.0b) and (1.0c)	(1.0a) and (1.0b)
93-94	6		Rewrite the Answer of Exercise 6.3(3)
95	6		Correct the reference list by adding the paper Lai & Lyu (2006) and removing the paper Lai and Lyu (2010).
97	7	$J=\int p\,dq$	$J=\oint p\,dq$
107	7	$\vert_{x=0}$	$\vert_{x=x_0}$
108	7	$\vert_{x=0}$	$\vert_{x=x_0}$
149-164	11		(1) Correct the errors in the equation of D_{xx} on page 149. (2) Reformat the text on pages 149-150. (3) Rewrite the equation (11.66) to make it easy to read.

2011-04-18

page(s)	**Chaper**	**original text**	**correction(s)**
2	1	The SI nits are ...	The SI units are ...

53	5	... in compare with he equilibrium sate.	... in comparison with the equilibrium state.
94	6	Exercise 6.3	Exercise 6.4
143	10	Exercise 3.1 Exercise 3.2 Exercise 3.3	Exercise 10.1 Exercise 10.2 Exercise 10.3