Errata to the book:

Martin Kružík, Tomáš Roubíček: Mathematical Methods in Continuum Mechanics of Solids. Springer, Switzerland, 2019, pp.i-xiii, 1-617. ISBN 978-3-030-02064-4, ISSN 1860-6245, eBook ISBN 978-3-030-02065-1, DOI 10.1007/978-3-030-02065-1.

p.42, line 10: ":==" should be ":=".
p.174, line 1: "Lorenz" should be "Lorentz".
p.175, line 17: "demagnetizing" is to be "demagnetizing field".
p.176, line 6: "Lorenz" should be "Lorentz".
p.181, line 14: "Lorenz" should be "Lorentz".
p.187, line 29: "Lorenz" should be "Lorentz".
p.206, line 9: "Ω" in the last two integals should be "$\mathbb{R}^d$".
p.206, footnote 12, line 2: "us to 2nd-order" should be "up to 2nd-order".
p.212, (6.4.5a): "$\mathbb{D}\mathrm{Lin}(\mathbb{R}^{d\times d}_{\rm sym})$, $\mathbb{C}\mathrm{SLin}(\mathbb{R}^{d\times d}_{\rm sym})$" should be "$\mathbb{D}\in\mathrm{Lin}(\mathbb{R}^{d\times d}_{\rm sym})$, $\mathbb{C}\in\mathrm{SLin}(\mathbb{R}^{d\times d}_{\rm sym})$".
p.231, line 18: "$\rho\mathbb{D}^{-1}\dot\sigma$" should be "$\mathbb{D}^{-1}\dot\sigma$".
p.312, line 8 bottom: "H^2" should be "H^1".
p.314, line 11: "$;\mathbb{R}^d$" is missing 3 times.
p.324, line 6: "$H^1(I;H^1(\Omega;H^1(\Omega;\mathbb{R}^d))$" is to be "$H^1(I;H^1(\Omega;\mathbb{R}^d))$".
p.320, formula (7.6.13a): "$\frac12 K_{\rm E}$" is to be "$\frac{d}{2}K_{\rm E}$".
p.320, formula (7.6.13b): "$\frac12 K_{\rm v}$" is to be "$\frac{d}{2}K_{\rm v}$".
p.320, formula (7.6.14): "β^2M/d" and "$\mathbb{I}/\beta$" should be "β^2Md" and "$\mathbb{I}/(d\beta)$", respectively.
p.324, line 16 bottom: Rem.7.6.10, line 2: "like in ..... is" is to be "like in (7.6.19) is".
p.325, line 16 bottom: "$\frac12\int_\Omega$" should be "$\frac12\int_\Omega\int_\Omega$".
p.345, formula (7.7.33): "κ_2" should be "$\varkappa$" and "p" should be "r" and label (7.7.33c) to add.
p.345, formulas (7.7.34) and (7.7.35): "$\frac{\varkappa}{2}''$" should be "$\frac{\varkappa}{r}''$".
p.346, line 10: "2" should be "r".
p.356, footnote: "and mantle, $10^{14}-10^{15}\,$Pa s" should be "and $10^{14}-10^{15}\,$Pa s in the mantle,"
p.358, formula (8.1.4): "enery" is to be "energy".
p.362, last line: "equal, namely $c_{\rm v}=-\theta\partial^2_{\theta\theta}$" should be "equal to $c_{\rm v}=-\theta\partial^2_{\theta\theta}\psi(e,z,\theta)$".
p.365, formula (8.1.37): "$\varphi_{\rm c}$" should be "$-\varphi_{\rm c}$".
p.367, line 12 bottom: "continuous" is to be "continuous and nondecreasing".
p.367, line 1 bottom: a sentence "On the other hand, the assumption $c_{\rm v}$ nondecreasing in (8.2.3a) is related only with the method of the proof by time discretization and would not be needed for Galerkin method as outlined in Remark 8.2.3 below." is to be added.
p.368, line 19: "blow us" is to be "blow up".

p.370, line 8: "$w_\varepsilon(\theta_\tau)$" should be "$w_\varepsilon(\theta)$".
p.371, line 8: "$w_\varepsilon \circ \mathcal{C}_{\rm v}^{-1}$" should be "$w_\varepsilon c_{\rm v}$".
p.371, line 9: "$\mathcal{C}_{\rm v}^{-1}$ are increasing" should be "$c_{\rm v}$ are nondecreasing".
p.371, line 20: "cf. from (8.2.3b)" should be "cf. (8.2.3b)".
p.374, line 1: ". we" is to be ". We"
p.374, formula (8.2.26a): "$\mathscr{C}_{\rm v}$" is to be "$\mathscr{C}_{{\rm v},k}$".
p.374, line 3 bottom: "$\theta_0/(1+\theta_0)$" is to be "$\theta_0/(1+\varepsilon\theta_0)$".
p.374, line 2 bottom: "$\mathscr{C}_{{\rm v},k} : V_k \to V_k^*$" is to be added.
p.374, line 1 bottom: "$\langle \mathscr{C}_{{\rm v},k}(\theta), v\rangle = \int_\Omega \mathscr{C}_{\rm v}(\theta) v \,{\rm d}x$" is to be added.
p.375, Remark 8.2.4: "$c_{\rm v}(\theta)$" should be "$c_{\rm v}(\theta_\varepsilon)$" (8x).
p.375, formula (8.2.28): "$\int_Q$" is to be displaced from the first line to the second line.
p.375, line 23: "$(1+\theta)^{1+\varepsilon}$" is to be "$(1+\theta_\varepsilon)^{1+\varepsilon}$".
p.379, line 4: "$\varepsilon|e|^q \le \zeta'(e) \le C(1+|e|^q)/\varepsilon$" is to be "$\varepsilon|e|^q \le \zeta'(e)$:$e$ and $\zeta'(e) \le (1+|e|^{q-1})/\varepsilon$".
p.379, line 6 bottom: "the the" is to be "the".
p.379, line 1 bottom: "$(1+\varepsilon\zeta'(\dot e)$" is to be "$(1+\varepsilon\zeta'(\dot e))$".
p.380, line 2: a closing parenthesis to be added.
p.388, formulas (8.4.9) and (8.4.10): "$\|\theta\|^p_{L^p(Q;R^d)}$" is to be "$\|\theta\|^p_{L^p(Q)}$".
p.404, line 20: "$\dot|^2$" is to be "$\dot c|^2$".
p.422, line 4: "$\rho = 0$" is to be "$\rho > 0$".
p.434, line 2 bottom: "$e(u) = e_{\rm EL} + e_{\rm EL}$" is to be "$e(u) = e_{\rm EL} + e_{\rm VI}$".
p.450, formula (9.4.45a): "H^2" is to be "$H^{2+\gamma}$".
p.482, (Z): "it not much clear" should be "it is not much clear".
p.571, line 2 bottom: "$({\rm div}|\nabla z|^{r-2}\nabla z)$" should be "${\rm div}(|\nabla z|^{r-2}\nabla z)$".
p.571, line 1 bottom: "2" should be "r".
p.572, lines 1 and 3: "2" should be "r".
p.572, line 6: the factor "$(r-1)$" is missing infront of the last term.
p.593, Ref. 282: "korn" is to be "Korn".
p.610, line 6 bottom: "Lorenz" should be "Lorentz".

Feb. 2025