

## Wielkości magnetyczne. Oznaczenia i jednostki spotykane w literaturze i ich związek z wielkościami w układzie MKSAzr

| Nazwa wielkości   | Definicja wielkości   | Jednostka w MKSA zr | Równa jest jednostkom       | Wielkości               | Źródło   |
|---|---|---------------------|-----------------------------|-------------------------|--|
| Indukcja magnetyczna  | $B = \mu H = \frac{\Phi}{S}$  | 1 Wb/m <sup>2</sup> | 1 Wb/m <sup>2</sup>         | $B$                     | [5], [6], [7], [8], [9], [15], [21], [25], [33]  |
|   |   |                     | 10 <sup>4</sup> Gs          | $B$                     | [1], [3], [8], [10], [11], [12], [14], [17], [22], [23], [24], [30], [32], [34], [35], [37], [40], [41], [42], [44], [46]                  |
| Magnetyzacja (natężenie magnesowania)   | $J = B - \mu_0 H$   | 1 Wb/m <sup>2</sup> | 1 Wb/m <sup>2</sup>         | $J$                     | [4], [7]   |
|   |   |                     | 10 <sup>4</sup> Gs          | $B - \mu_0 H$           | [5]  |
|   |   |                     |                             | $4\pi J$                | [19], [30]   |
|   |   |                     |                             | $4\pi I$                | [1], [2], [3], [6], [30], [31], [35]   |
| Natężenie pola magnetycznego (wewn. solenoidu)                                  | $H = \frac{iz}{l}$  | 1 A/m               | 1 A/m                       | $H$                     | [4], [6], [7], [8], [9], [15], [21], [25]  |
|   |   |                     | 0,01 A/cm                   | $H$                     | [39]   |
|   |   |                     | $4\pi \cdot 10^{-3}$ Oe     | $H$                     | [1], [2], [3], [8], [10], [11], [12], [13], [14], [19], [23], [24], [26], [27], [30], [31], [32], [34], [35], [40], [41], [42], [44], [46] |
| Odwracalna przenikalność magnetyczna przy stałych natężeniach $\sigma$          | $\mu_\sigma = \lim_{\Delta H \rightarrow \Delta H_r} \left( \frac{\Delta B}{\Delta H} \right)_\sigma$           | 1 H/m               | 1 H/m                       | $\mu_\sigma$            | [15], [39]   |
|   |   |                     | $\frac{1}{4\pi} 10^7$ Gs/Oe | $\mu^\sigma$            | [4], [6], [8], [9]   |
|   |   |                     |                             | $\mu^T$                 | [25], [33]   |
|   |   |                     |                             | $\mu_\sigma$            | [1], [22], [23], [24], [40], [41]  |
|   |   |                     |                             | $\mu_p$                 | [10]   |
|   |   |                     |                             | $\mu'$                  | [42]   |
| $\mu_0$   | [40], [41]  |                     |                             |                         |  |
| Odwr. pod. magn. przy st. $\sigma$  | $\kappa_\sigma = \mu_\sigma - \mu_0$  | 1 H/m               | 1 H/m                       | $\kappa^\sigma$         | [4]  |
| Odwracalna przenikalność magnetyczna przy stałych odkształceniach $\varepsilon$ | $\mu_\varepsilon = \lim_{\Delta H \rightarrow \Delta H_r} \left( \frac{\Delta B}{\Delta H} \right)_\varepsilon$ | 1 H/m               | 1 H/m                       | $\mu^\varepsilon$       | [6], [8]   |
|   |   |                     |                             | $\mu^s$                 | [25]   |
|   |   |                     |                             | $\mu^\lambda$           | [9]  |
|   |   |                     |                             | $\mu_\xi$               | [15]   |
|   |   |                     | $\frac{1}{4\pi} 10^7$ Gs/Oe | $\mu_\lambda$           | [22], [23], [24], [40], [41]   |
|   |   |                     |                             | $\mu$                   | [34], [35], [37], [42], [44], [46]   |
|   |   |                     |                             | $\mu_s$                 | [10]   |
|   |   |                     |                             | $\mu_r$                 | [11], [12], [13], [14]   |
|   |   |                     |                             | $\mu_c$                 | [44]   |
| Względna przenikalność odwracalna przy stałych $\varepsilon$                    | $\mu'_\varepsilon = \frac{\mu_\varepsilon}{\mu_p}$  | 1                   | 1                           | $\mu_r$                 | [11], [12], [13], [14]   |
|   |   |                     |                             | $\mu_i$                 | [21]   |
|   |   |                     |                             | $\mu$                   | [21], [42]   |
|   |   |                     |                             | $\mu^\varepsilon/\mu_0$ | [8]  |
|   |   |                     |                             | $\mu^\varepsilon$       | [4]  |
| Odwr. pod. magn. przy st. $\varepsilon$   | $\kappa_\varepsilon = \mu_\varepsilon - \mu_0$  | 1 H/m               | 1 H/m                       | $\kappa^\varepsilon$    | [4]  |
|   |   |                     | $\frac{1}{4\pi} 10^7$ Gs/Oe | $\kappa$                | [26], [27]   |
| Względna podatność odwr. przy st. $\varepsilon$                                 | $\kappa'_\varepsilon = \frac{\kappa_\varepsilon}{\mu_0}$  | 1                   | 1                           | $\kappa^\varepsilon$    | [4]  |