

Use of the Solidus between Words, Symbols, and Abbreviations

Please note the policy followed in *Physical Review A* and *Physical Review E* for notation using a solidus (or slash).

Between words

Except for the term “and/or,” the use of the slash is discouraged between words and abbreviations, as the intent of the solidus is ambiguous. Several possibilities for its meaning exist, among them “and,” “or,” “and/or,” and “plus.” We require that more precise, and therefore more meaningful, conjunctions be used. In some cases, a hyphen or long hyphen (“en” dash) can serve as a replacement; for example, in “Hartree/Fock theory,” the slash should be replaced by a hyphen: “Hartree-Fock theory.”

For parallel alternatives, we prefer the use of parentheses (or brackets) for this form:

The diffusivity of the north (south) particles depends only on the density of the east (west) particles.

Between elements or molecules

The solidus can be used between elements or molecules for interface, heterojunction, adlayer, and superlattice notation, for example, GaAs/Al_xGa_{1-x}As. For general system and mixture notation, the hyphen is used: Ar-methane system, water-oil mixture.

For ratios involving elements, molecules, states, or transitions, the quantity in the ratio should be expressed in cross section, intensity, or concentration ratios, e.g.:

$\sigma(\text{Al})/\sigma(\text{Ge})$ instead of Al/Ge

$I(\text{Sm}^{2+})/I(\text{Sm}^{3+})$ instead of Sm²⁺/Sm³⁺

$I(KL_1M_1)/I(KL_1M_{23})$ instead of KL_1M_1/KL_1M_{23}

$C(\text{Ag})/C(\text{Cu})$ or [Ag]/[Cu] instead of Ag/Cu for concentration ratio

Between symbols, numbers, and units

The solidus is used to indicate the operation of division (e.g., ab/c , $3/2$), and special basis-set and Padé approximant notation (e.g., $(3s/2p)$, $[3s/2p]$, $2/2$).

Multiple slashes, such as those in eV/sr/sec or $a/b/c$, for example, need to be modified, as the extent of the denominator is ambiguous. For units, often only the first slash is needed: eV/sr sec. For quantities, parentheses should be inserted to group the numerator and/or denominator: $(a/b)/c$ or $a/(b/c)$.