Boolean searches

v1a

2020-06-25

DELIMITER

((base\_element OR symbol) AND (alloy\_element OR symbol) AND (age\* OR aging OR precipitat\*) AND (phase\* OR hardness OR hardening OR tensile OR microsc\* or SEM OR TEM OR diffract\* OR dilatom\* OR (mech\* AND (prop\* OR response)))

NOT (bio\* or diseas\* or cancer or

Binary

EL means element (both symbol and full name(s): Al and Aluminum and Aluminium)

FINDING THE BASE ELEMENT

“EL-“ (including minus sign, em-dash, en-dash)

“EL-base”

“EL alloy\*”

“EL-{0,1,2,3,4,5,6,7,8,9}”

“EL-rich”

“{alloy\* of} EL with”

AND

FINDING THE ALLOY ELEMENTS

“-EL”

“EL-lean” ???

“EL-contain\*”

“contain\* EL”

“-{0,1,2,3,4,5,6,7,8,9}EL” Al-4Cu

“-{0,1,2,3,4,5,6,7,8,9} EL” Al-4 Cu

“-{0,1,2,3,4,5,6,7,8,9}%EL” Al-4%Cu

“-{0,1,2,3,4,5,6,7,8,9}% EL” Al-4% Cu

“-{0,1,2,3,4,5,6,7,8,9} pct EL” Al-4 pct Cu

“additions of EL”

“additions of EL and EL”

EITHER BASE OR ALLOY

“group \* {element\* OR metal\*} The Alloy Systems of the Group VA Metals with Yttrium