Research Questions/ Search Strategy development

Does calcite precipitation within soil pores minimize the overall swelling nature of expansive soils? If yes, by what percent?
Calcite precipitation AND soil pores AND expansive soils

July 17, 2017
“Calcite precipitation” AND “expansive soils” = 26 in Google Scholar
... geomicrobiology...
...IJST: Study on improvement of soil behaviour by bio-stabilisation method, Kamaraj, Janani etc.

July 19
“Calcite precipitation” AND “expansive soils” = 0 in Engr Village
“Calcite precipitation” AND expansive soils = 2 in Engr Village
(“Calcite precipitation” OR micp) AND expansive soils = 2 in Engr village
(“Calcite precipitation” OR micp) AND (expansive soils Or Clay) = 148 in Engr village
Calcite/ carbonate
Biocement
Biotreatment
Fine grained soil
Biomineralization
Kaolinite?
Micp also means: mercury injection capillary pressure | mercury intrusion capillary pressure
(“Calcite precipitation” OR micp) AND (expansive soils Or Clay) Not “mercury intrusion” = 140 in Engr Village
(“calcite precipitation” OR carbonate precipitation”) AND clay = 246 in Engr Village
(“calcite precipitation” OR carbonate precipitation”) AND swelling = 21 in Engr Village
[Biological treatment of swelling soils using Microbial Calcite Precipitation by Sadjadi]
Sept 25, 2018
"microbial induced calcium carbonate" = 46 Eng Village
"microbial induced calcite precipitation" = 110 Eng Village

[Factors Affecting Improvement in Engineering Properties of Residual Soil through Microbial-Induced Calcite Precipitation]

October 5, 2018
CPX
"calcite precipitation" OR "carbonate precipitation"
AND
microbial
AND
clay OR swell OR expansive OR kaolin OR "fine grained" = 201

AND "pore size" = 5

note: "calcite precipitation" OR "carbonate precipitation" AND microbial AND clay OR swelling OR expansive OR kaolin OR "fine grained" = 116 records

CPX: Another tangent
microbial ONEAR/0 induced ONEAR/1 calcite ONEAR/2 precipitation = 422 records

microbial ONEAR/0 induced ONEAR/1 calcite ONEAR/2 precipitation OR microbial ONEAR/0 induced ONEAR/1 carbonate ONEAR/2 precipitation = 622 records
AND swell* OR clay OR expansive OR "fine grained soil" OR kaolin* = 29 records | de duped = 23 with remaining dups showing different sources

onear can't be used with truncation, wildcards or double quotations
Autostemming is on

microbial ONEAR/1 calcite ONEAR/2 precipitation OR microbial ONEAR/1 carbonate ONEAR/2 precipitation AND swell* OR clay OR expansive OR "fine grained soil" OR kaolin* = 36 records

Google Scholar "calcite precipitation" OR "carbonate precipitation" microbial clay OR swell OR expansive OR kaolin OR "fine grained" = 12,300 "calcite precipitation" OR "carbonate precipitation" microbial clay OR swell OR expansive OR kaolin OR "fine grained" "pore size" = 1,160 "microbial induced calcite precipitation" clay OR swell OR expansive OR kaolin OR "fine grained" "pore size" = ~73

ASCE Research Library "calcite precipitation" OR "carbonate precipitation" AND microbial AND clay OR swell OR expansive OR kaolin OR "fine grained" = 68