

Appendix 1

Search syntax in different databases

Scopus

- #1 (TITLE-ABS-KEY “firefighter*”) + OR AND TITLE-ABS-KEY ("fire and rescue" OR firefighters OR fire fire fighter OR firefight OR firemen)
- #2 AND ("cardiovascular" OR “cardiovascular abnormalities” OR “HRV*” OR “heart rate variability*” OR "heart rate interval" OR “aging” OR “RR variability” OR “cycle length variability” OR “heart period variability” OR “autonomic function” OR “vagal control” OR “lipid profile” OR “cholesterol” OR “diabetes” AND “mellitus” OR “blood glucose” OR “age” OR “obesity”) AND (EXCLUDE (DOCTYPE , "no") OR EXCLUDE (DOCTYPE , "cp") OR EXCLUDE (DOCTYPE , "ch") OR EXCLUDE (DOCTYPE , "bk"))
- #3 AND (“muscular injury” OR {“musculoskeletal” AND “system”} OR “muscular pain” OR “chronic Pain” OR “acute pain” “acute injury” OR “muscular health”) AND (EXCLUDE (DOCTYPE , "no") OR EXCLUDE (DOCTYPE , "cp") OR EXCLUDE (DOCTYPE , "ch") OR EXCLUDE (DOCTYPE , "bk"))
- #4 AND ({physical fitness} OR “exercise” OR “physical exertion” OR “muscular strength” OR “muscular endurance” OR “aerobic fitness*” OR “cardiorespiratory fitness*” OR “cardiorespiratory capacity*”) AND (EXCLUDE (DOCTYPE , "no") OR EXCLUDE (DOCTYPE , "cp") OR EXCLUDE (DOCTYPE , "ch") OR EXCLUDE (DOCTYPE , "bk"))
- #5 AND ({work performance} OR “endurance*” OR “work fitness*” OR "work performance" OR "work classification" OR "occupational health" OR “employee health” OR “health, industrial” OR “industrial health” OR “occupational safety” OR “safety, occupational*”) AND (EXCLUDE (DOCTYPE , "no") OR EXCLUDE (DOCTYPE , "cp") OR EXCLUDE (DOCTYPE , "ch") OR EXCLUDE (DOCTYPE , "bk"))
- #6 #1 AND #2 OR #1 AND #3 OR #1 AND #4 OR #1 AND #2 AND #3 OR #1 AND #2 AND #4 OR #1 AND #3 AND #4 OR #1 AND #2 AND #3 AND #4 OR #1 AND #5 OR #2 AND #5 OR # 3 AND #5 OR #3 AND #5

Web of sciences

- #1 TOPIC:(Firefighter*)/ ("fire and rescue" OR firefighters OR fire fighter OR firefight OR firemen) a
- #2 AND TOPIC:(“cardiovascular” OR “cardiovascular abnormalities” OR “HRV*” OR “heart rate variability*” OR "heart rate interval" OR “aging” OR “RR variability” OR “cycle length variability” OR “heart period variability” OR “autonomic function”

- OR “vagal control” OR “lipid profile” OR “cholesterol” OR “diabetes” AND “mellitus” OR “blood glucose” OR “age” OR “obesity”) Refined by: [excluding] DOCUMENT TYPES: (PROCEEDINGS PAPER OR BOOK CHAPTER OR NOTE OR MEETING ABSTRACT)
- #3 AND TOPIC:(“muscular injury” OR {“musculoskeletal” AND “system”} OR “muscular pain” OR “chronic Pain” OR “acute pain” “acute injury” OR “muscular health”) Refined by: [excluding] DOCUMENT TYPES: (PROCEEDINGS PAPER OR BOOK CHAPTER OR NOTE OR MEETING ABSTRACT)
- #4 AND TOPIC:(“physical fitness” OR “exercise” OR “physical exertion” OR “muscular strength” OR “muscular endurance” OR “aerobic fitness” OR “cardiorespiratory fitness” OR “cardiorespiratory capacity”) Refined by: [excluding] DOCUMENT TYPES: (PROCEEDINGS PAPER OR BOOK CHAPTER OR NOTE OR MEETING ABSTRACT)
- #5 AND TOPIC:(work performance OR “endurance*” OR “work fitness” OR "work performance" OR "work classification" OR "occupational health" OR “employee health” OR “health, industrial” OR “industrial health” OR “occupational safety” OR “safety, occupational*”) Refined by: [excluding] DOCUMENT TYPES: (PROCEEDINGS PAPER OR BOOK CHAPTER OR NOTE OR MEETING ABSTRACT)
- #6 #1 AND #2 OR #1 AND #3 OR #1 AND #4 OR #1 AND #2 AND #3 OR #1 AND #2 AND #4 OR #1 AND #3 AND #4 OR #1 AND #2 AND #3 AND #4 OR #1 AND #5 OR #2 AND #5 OR #3 AND #5 OR #3 AND #5

Embase

- #1 (firefighter*:ab,ti OR firefighters*:ab,ti OR fire and rescue personnel*:ab,ti OR firefight*:ab,ti OR fire firefighter*:ab,ti OR firemen*:ab,ti)
- #2 AND (cardiovascular*:ab,ti OR ‘cardiovascular abnormalities’:ab,ti) OR ‘HRV’:ab,ti OR ‘heart rate variability’:ab,ti OR ‘heart rate interval’:ab,ti OR ‘aging’:ab,ti OR ‘RR variability’:ab,ti OR ‘cycle length variability’:ab,ti OR ‘heart period variability’:ab,ti OR ‘autonomic function’:ab,ti OR ‘vagal control’:ab,ti OR ‘lipid profile’:ab,ti OR ‘cholesterol’:ab,ti OR ‘diabetes’:ab,ti AND ‘mellitus’:ab,ti OR ‘blood glucose’:ab,ti OR ‘age’:ab,ti OR ‘obesity’:ab,ti)
- #3 (muscular injury*:ab,ti OR ‘musculoskeletal’:ab,ti AND ‘system’:ab,ti OR ‘muscular pain’:ab,ti OR ‘chronic Pain’:ab,ti OR ‘acute pain’:ab,ti OR ‘acute injury’:ab,ti OR ‘muscular health’:ab,ti).
- #4 (physical fitness*:ab,ti OR ‘exercise’:ab,ti OR ‘physical exertion’:ab,ti OR ‘muscular strength’:ab,ti OR ‘muscular endurance’:ab,ti OR ‘aerobic fitness’:ab,ti OR ‘cardiorespiratory fitness’:ab,ti OR ‘cardiorespiratory capacity’:ab,ti)
- #5: (work performance*:ab,ti OR occupational performance*:ab,ti OR ‘endurance’:ab,ti OR ‘work fitness’:ab,ti OR ‘work performance’:ab,ti OR ‘work classification’:ab,ti OR

'occupational health':ab,ti OR 'employee health':ab,ti OR 'health, industrial':ab,ti OR 'industrial health':ab,ti OR 'occupational safety':ab,ti OR 'safety, occupational':ab,ti)

- #6 #1 AND #2 OR #1 AND #3 OR #1 AND #4 OR #1 AND #2 AND #3 OR #1 AND #2 AND #4 OR #1 AND #3 AND #4 OR #1 AND #2 AND #3 AND #4 OR #1 AND #5 OR #2 AND #5 OR #3 AND #5 OR #3 AND #5

EBSCOHost

- #1 Subject Terms:("Firefighter" OR "fire and rescue" OR "firefighters" OR "fire fighter" OR "firefight" OR "firemen") Field:(All text)
- #2 AND ("cardiovascular" OR "cardiovascular abnormalities" OR "HRV*" OR "heart rate variability*" OR "heart rate interval" OR "aging" OR "RR variability" OR "cycle length variability" OR "heart period variability" OR "autonomic function" OR "vagal control" OR "lipid profile" OR "cholesterol" OR "diabetes" AND "mellitus" OR "blood glucose" OR "age" OR "obesity") Field:(All text)
- #3 AND ("muscular injury" OR {"musculoskeletal" AND "system"}) OR "muscular pain" OR "chronic Pain" OR "acute pain" "acute injury" OR "muscular health") Field (All text)
- #4 AND ("physical fitness" OR "exercise" OR "physical exertion" OR "muscular strength" OR "muscular endurance" OR "aerobic fitness*" OR "cardiorespiratory fitness*" OR "cardiorespiratory capacity*") Field:(All text)
- #5 AND (work performance OR "endurance" OR "work fitness" OR "work performance" OR "work classification" OR "occupational health" OR "employee health" OR "health, industrial" OR "industrial health" OR "occupational safety" OR "safety, occupational") Field:(All text)
- #6 #1 AND #2 OR #1 AND #3 OR #1 AND #4 OR #1 AND #2 AND #3 OR #1 AND #2 AND #4 OR #1 AND #3 AND #4 OR #1 AND #2 AND #3 AND #4 OR #1 AND #5 OR #2 AND #5 OR #3 AND #5 OR #3 AND #5

CINAHL

- #1 Subject Terms:("Firefighter" OR "fire and rescue" OR "firefighters" OR "fire fighter" OR "firefight" OR "firemen") Field:(All text)
- #2 AND ("cardiovascular" OR "cardiovascular abnormalities" OR "HRV*" OR "heart rate variability*" OR "heart rate interval" OR "aging" OR "RR variability" OR "cycle length variability" OR "heart period variability" OR "autonomic function" OR

- “vagal control” OR “lipid profile” OR “cholesterol” OR “diabetes” AND “mellitus” OR “blood glucose” OR “age” OR “obesity”) Field:(All text)
- #3 AND (“muscular injury” OR {“musculoskeletal” AND “system”} OR “muscular pain” OR “chronic Pain” OR “acute pain” “acute injury” OR “muscular health”) Field (All text)
- #4 AND (“physical fitness” OR “exercise” OR “physical exertion” OR “muscular strength” OR “muscular endurance” OR “aerobic fitness*” OR “cardiorespiratory fitness*” OR “cardiorespiratory capacity*”) Field:(All text)
- #5 AND (work performance OR “endurance” OR “work fitness” OR "work performance" OR "work classification" OR "occupational health" OR “employee health” OR “health, industrial” OR “industrial health” OR “occupational safety” OR “safety, occupational”) Field:(All text)
- #6 #1 AND #2 OR #1 AND #3 OR #1 AND #4 OR #1 AND #2 AND #3 OR #1 AND #2 AND #4 OR #1 AND #3 AND #4 OR #1 AND #2 AND #3 AND #4 OR #1 AND #5 OR #2 AND #5 OR # 3 AND #5 OR #3 AND #5