

Supplementary File 1: Search strategy

Medline via Ovid

1. Robotics/
2. Robo*.mp.
3. 1 or 2
4. Animal Assisted Therapy/
5. Pets/
6. companion.mp.
7. 4 or 5 or 6
8. 3 and 7
9. robo* cat.mp.
10. robo* dog.mp.
11. robo* anima*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
12. 8 or 9 or 10 or 11
13. Aged/
14. (age or elderly or senior citizen* or older adult).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
15. Dementia/
16. dementia.mp.
17. 15 or 16
18. 12 and 17
19. limit 18 to yr="2016 -Current"

PsycINFO via Ovid

1. Robotics/
2. Robo*.mp.
3. 1 or 2
4. Animal Assisted Therapy/
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15. Dementia/
16. dementia.mp.
17. 15 or 16
18. 12 and 17
19. limit 18 to yr="2016 -Current"

CINAHL

1. (MH "Robotics")
 2. robo*
 3. (MH "Pet Therapy")
 4. animal assisted therapy
 5. companion
 7. S1 OR S2
 8. S3 OR S4
 9. S7 OR S8
 10. robo* cat
 11. robo* dog
 12. robo* anima*
 13. S9 OR S10 OR S11 OR S12
 14. (MH "Aged")
 15. "older adults"
 16. (MH "Dementia")
 17. dementia
 18. S14 OR S15 OR S16 OR S17
 19. S13 AND S19
- (Limiters - Published date 2016/01/01 -)

Web of Science Core Collection

1. TOPIC: (robo*)
 2. TOPIC: ("pet therapy")
 3. TOPIC: ("animal assist* therapy")
 4. TOPIC: ("robo* cat")
 5. TOPIC: ("robo* dog")
 6. TOPIC: ("robo* animal")
 7. TOPIC: ("social robot")
 8. TOPIC: ("social assistive robot")
 9. TOPIC: ("socially assistive robot")
 10. TOPIC: ("companion robot")
 11. #3 OR #2
 12. #11 AND #1
 13. #12 OR #10 OR #9 OR #8 OR #7 OR #6 OR #5 OR #4
 14. TOPIC: ("older people")
 15. TOPIC: ("older adult*")
 16. TOPIC: ("elder*")
 17. TOPIC: (dementia)
 18. #17 OR #16 OR #15 OR #14
 19. #18 AND #13
 20. #18 AND #13
- Refined by: PUBLICATION YEARS: (2020 OR 2019 OR 2018 OR 2017 OR 2016)

Scopus

1. TITLE-ABS-KEY (robo*)
 2. TITLE-ABS-KEY ("animal assist* therapy")
 3. TITLE-ABS-KEY ("pet therapy")
 4. TITLE-ABS-KEY ("robo* cat")
 5. TITLE-ABS-KEY ("robo* dog")
 6. TITLE-ABS-KEY ("robo* pet")
 7. TITLE-ABS-KEY ("robo* animal")
 8. TITLE-ABS-KEY ("social* assist* robot")
 9. TITLE-ABS-KEY ("companion robot")
 10. #2 OR #3
 11. #1 AND #10
 12. #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #11
 13. TITLE-ABS-KEY ("older people")
 14. TITLE-ABS-KEY ("older adult*")
 15. TITLE-ABS-KEY ("elder*")
 16. TITLE-ABS-KEY (dementia)
 17. #13 OR #14 OR #15 OR #16
 18. #12 AND #17
- Publication limit 2016 – 2020