

## ISG Detailed program Ver.6

Each time there will be parallel sessions during the same time. (up to 6 parallel)

The scheduled time standard is KST(UTC/GMT +9).

**Your presentation time will differ based on the presentation type.**

The number in the program is your submission ID number when you submitted.

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Please upload your presentation file at <https://www.dropbox.com/request/VS8ggYlhx2ELa8EPcWGC>.

In-Person	Online
<b>MON, 10/24 @ 2:30 PM</b>	<b>MON, 10/24 @ 10:00 PM</b>
<b>2401.</b> Symposium 7. Others - 578 (Barbara Klein) <b>2402.</b> Symposium 7. Others - 774 (Hye-Ri Shin) <b>2403.</b> Symposium 3. Health - 818 (Moo-Kwon Chung) <b>2404.</b> Oral 3. Health - (Fall/Balance) 506, 536, 733, 739 <b>2405.</b> Oral 7. Others - (Medical) 557, <b>655</b> , <b>665</b> , 717	<b>2421.</b> On-Symposium 1. Housing - (Dementia Care) 530 <b>2422.</b> On-Oral 4. Info - (Dialogue) 497, 552, <b>575</b> , 696 <b>2423.</b> On-Oral 3. Health - (Robots) 691, 730, <b>759</b> , 760
<b>MON, 10/24 @ 4:30 PM</b>	<b>MON, 10/24 @ 11:00 PM</b>
<b>2406.</b> Symposium 1. Housing - 541 (Won-Kyung Song) <b>2407.</b> Symposium 7. Others - 721 (Helianthe Kort) <b>2408.</b> Symposium 3. Health - 750 (Hongsoo Kim) <b>2409.</b> Oral 4. Info - (Intervention) 531, 544, 732 <b>2410.</b> Oral 6. Governance - (Perspectives) <b>538</b> , 576, 724, 746	<b>2424.</b> On-Symposium 7. Others - (Soci-Gerontech) <b>571</b> <b>2425.</b> On-Oral 3. Health-(VR/Medical) 563,607,618 <b>2426.</b> On-Oral 7. Others-(Active Aging)532, <b>562</b> ,749,775
<b>TUE, 10/25 @ 10:30 AM</b>	<b>TUE, 10/25 @ 9:00 PM</b>
<b>2501.</b> Symposium 3. Health - 527 (Gwi-Ryung Hong) <b>2502.</b> Symposium 3. Health - 757 (Yu Seong Hwang) <b>2503.</b> Symposium 2. Transport - 793 (Moon Choi) <b>2504.</b> Oral 1. Housing - (Smart Home)566, <b>574</b> ,577,769	<b>2521.</b> On-Symposium 4. Info - 560 (Johannes Doll) <b>2522.</b> On-Oral 3. Health - (AI) 509, <b>556</b> , 634, 713 <b>2523.</b> On-Oral 4. Info - (Robot) 510, <b>582</b> , <b>614</b> , 673
<b>TUE, 10/25 @ 2:30 PM</b>	<b>TUE, 10/25 @ 10:00 PM</b>
<b>2505.</b> Symposium 3. Health - 777 (BeLong Cho) The Korean Geriatrics Society <b>2506.</b> Symposium 3. Health - 789 (Jaekwang Kim) Korea Dementia Research Center <b>2507.</b> Symposium 3. Health - 821 (Kun Ho Lee) Gwangju Alzheimer's and Related Dementia Cohort Research Center <b>2508.</b> Symposium 3. Health - 808 (Joong-Jean Park) The Korean Society For Gerontology <b>2509.</b> Oral 4. Info - (Digital Divide) <b>522</b> , <b>584</b> , 806 <b>2510.</b> Oral 3. Health - (Exercise/Leisure) 553, 658, 728	<b>2524.</b> On-Symposium 3. Health -(Tech Innovations) <b>593</b> <b>2525.</b> On-Oral 3. Health - (Movement)545,568,570, <b>684</b> <b>2526.</b> On-Oral 4. Info - (Digital Use) <b>547</b> , 567, 585, <b>734</b>
<b>TUE, 10/25 @ 4:30 PM</b>	<b>TUE, 10/25 @ 11:00 PM</b>
<b>2511.</b> Symposium 3. Health - 542 (Stefanie Baisch) <b>2512.</b> Symposium 4. Info - 587 (Henk-Herman Nap) <b>2513.</b> Symposium 6. Policy - 744 (Young Sam Lee) <b>2514.</b> Symposium 3. Health - 822 (Sheng-Min Wang) Korean Association Geriatric Psychiatry <b>2515.</b> Oral 3.Health-(Care/Technology) <b>513</b> ,520,554,558 <b>2516.</b> Oral 7. Others - (Policy) 605, <b>636</b> , 725	<b>2527.</b> On-Symposium 7. Others-(Gerontechnology) <b>517</b> <b>2528.</b> On-Oral 1.Housing-(Community) <b>537</b> ,649,689,755 <b>2529.</b> On-Oral 7. Others - (Health) 569, 586, <b>708</b> , <b>762</b>

<b>WED, 10/26 @ 9:00 AM</b>	
<b>2601.</b> Symposium 3. Health-515(Woochol Joseph Choi) <b>2602.</b> Symposium 4. Info - 679 (Ahyoung Lee) <b>2603.</b> Symposium 4. Info - 999 (Moon Choi) <b>2604.</b> Oral 1. Housing -(Assistive Tec)507,523,697,711 <b>2605.</b> Oral 3. Health - (Monitoring) 573, 686, 706, <b>726</b> <b>2606.</b> Oral 3. Health - (Care) <b>604, 650, 653</b>	

## <In-Person>

**MON, 10/24 @ 2:30 PM**

### Session ID:2401

#### Symposium 7. Others

**578**

**Current trends in Gerontechnology. Recent findings from the Austrian-German-Swiss Chapter**

B. Klein, S. Merkel (Convener)

**Relationships between ICT use and subjective well-being among the oldest-old in Germany: Findings from the NRWBO+ study**

**Older persons and the domestication of smart speakers**

A. B. Kucharski, S. Merkel

**“Computer, how do smart speakers support aging in place?” – Smart Speakers and Images of Ageing**

S. Merkel, A. B. Kucharski, S. Schorr

**Smart Speakers and Chatbots in Care Consultation – Evaluation of Use Cases and Challenges**

J. Bleja, S. Neumann, U. Grossmann

**AI for Simplifying the use of an assistive robotic arm for people with severe body impairments**

A. Baumeister, M. Pascher, Y. Shivashankar, F. Goldau, U. Frese, J. Gerken, E. Gardó, B. Klein, P. Tolle

**Evaluation of design options for an assistive robot in augmented reality**

M. Ringwald, J. Sehart, B. Klein, H. Solis, J. Umansky, P. Nauth

### Session ID:2402

#### Symposium 7. Others

**774**

**ICT-Medical convergence Patient Transfer Assistant Robot system**

K.W. Jung, B.W. Lee, B.H. Lim, J.H. Yoon, S.H. Kim, M.W. Moon, Y.J. Cho

**Evaluating the Smart Transfer Assistive Robot with Dual Arms in Health care Workers**

H.R. Shin, H.J. Yoon, S.W. Ban, Y.G Kim, S.R. Um, W.C. Shin, Y.S. Kim

**Technology Applied Recipe Development to Increase Fruits Intake of the Elderlies with Decreased Chewing and Swallowing Function**

H.S. Lim, Y. Park, J.W. Han, Y.J. Sung, D. Kim, Y.S. Kwon

**What bibliometric and scientometric analysis tells about the international research trends of smart home for older adults?**

Y.K. Hong, Z.Y. Wang, J.Y. Cho.

## Session ID:2403

### Symposium 3. Physical and Mental Health

818 (Moo-Kwon Chung)

**Interventions to promote health and mental health among older adults**

M.K. Chung

**How do communication skills influence older patients' satisfaction of health care services? - Empirical evidence from Korea**

J.N. Hwang, J.S. Kang, K.S. Moon, J.H. Kim, H.S. Woo, S.J. Park

**The Impacts of Physical Health and Social Networks on Depression Symptoms of Middle and Old Ages of the Korean Urban and Rural Complexity City**

M.K. Chung, T.S. Shin, J.Y. Park, M.H. Kim, K.J. Lee, J.K. Lee, S.W. Hwang, J.H. Lee, H.S. Lim, U.Edrenebayar

**The mental well-being of the elderly through mindful storytelling and physical activity**

H.Y. Hwang, S.J. Seo, H.T. Kim, H.K. Kim, H.J. Kim

## Session ID:2404

### Oral 3. Physical and Mental Health – (Fall/Balance)

506

**Muscle activation pattern to distinguish balance recovery from falls at loss of balance**

J. Park, S. Kim, W.J. Choi

536

**Potential negative effects of neuromuscular electrical stimulation: Does it affect static balance and proprioception?**

J.W. Je, W.J. Choi

733

**Use of mobile devices and their functionalities by Brazilian older people**

T. M. Raymundo, M. S. Bernardes, W. R. Boot, L. D. Bernardo

739

**Development of an automated fall detection device specific to wheelchair users**

L.A. Rice, L. Abou, A. Fliflet, P. Presti, J.J. Sosnoff, H.P. Mahajan, M.L. Frechette

## Session ID:2405

### Oral 7. Others – (Medical)

557

**Quantum-classical software for drug prescription simulation in aging people**

J. Alvarado-Valiente, J. Romero-Álvarez, E. Moguel, J. Garcia-Alonso, J.M. Murillo

655

**Comparative Analysis of Satisfaction by Types of Medical Electric Beds**

J.H. Jeong

665

**Effects of Age and Familiarity on Visual Word Recognition in Korean: Evidence from a Web-based Large Scale Lexical Decision Task**

H. Baek, P. C. Gordon, W. Choi

717

**Effects of end-of-life care education on nursing students' knowledge, attitude, and self-efficacy**

D. Lee, S.H. Tak, H. Choi

**MON, 10/24 @ 4:30 PM**

**Session ID:2406**

**Symposium 1. Housing and Daily Living**

541

**Care robots and service model development**

W.K. Song (Convener)

**Translational research and service model development based on smart care space for people with severely disability**

W.K. Song, K.J. Lee

**Comparative study of physical care burden on caregivers for elderly excretion care between human manual care and robot-aided care based on hierarchical excretion care task model**

J.B. Ko, H.J. Keom, C.K. Lee, B.H. Won, J.S. Hong

**Comparison of physical burden of caregivers when using transfer devices**

Y.M. Shin, Y.K. Kim, K.J. Lee, W.K. Song

**Development of patient-transfer robot considering user convenience and patient safety**

H. Kweon, K. Ha, J. Park, and C. Kim

**Utilization of an artificial intelligence automatic urination handling device according to the aspect of the individuals with disorders**

U.C. Lee

**Design, control, and evaluation of a meal-assistive robot based on gravity compensation for elderly people with muscle weakness**

K. Kim, J.H Kim, J.B Kim

**Session ID:2407**

**Symposium 7. Others**

721

**WHO-ISG Collaboration on Assistive Technologies for Healthy Ageing-in-Place: A Round Table Discussion**

E. Aspnes, J. Bergschold, N. Charness, M.L. Fang, G. Gutman, Y. Hsu, W. Kearns, H.S.M. Kort, T. Marquine, H. Nap, D. Zandi, W. Zhang

## Session ID:2408

### Symposium 3. Physical and Mental Health

750

**Delivery of health and social care for lower-income older adults in communities: Does technology help?**

H. Kim (Convener)

**ICT use promoting integrated health and social services through multi-disciplinary research efforts: cases from Korea**

H. Kim

**Development of needs-resources prediction model using integrated case management big data**

Y. Kim, H. Kim, T. Lee, S. Min, S. Park, W. Lee

**Development and validation of a mobile app-based interRAI CUSR for older adults in urban, low-income communities**

T.H. Lee, S. Chun, E. Kim, H. Kim

**A Smartphone application-based communications tool for the care management of community-dwelling older adults: Findings from the HWePS**

E. Kim, T.H. Lee, S. Chun, H. Kim

## Session ID:2409

### Oral 4. Information and Communication – (Intervention)

531

**Adaptation and evaluation of the digital elder abuse intervention “VOICES” in the primary care-based setting**

F. Abujarad, C. Edwards, B. Vander Wyk, P. Ellis, K. Kraemer, R. Marottoli.

544

**Improving the Assessment of Older Adults using Feature Selection and Machine Learning Models**

J. Rojo, J. García-Alonso, Juan M. Murillo, S. Helal

732

**The utilization of IOT technology in the study of communication between people with dementia and their caregivers**

D. Kim, S. Jeong

## Session ID:2410

### Oral 6. Governance and Social Policy – (Perspectives)

538

**An Introduction of the Assistive Technology R&D for Older People with Disabilities in Korea**

M.J. Lim, A.J.Kim, E.J.Kim, and S.D.Eun

576

**Gerontechnology for who? A responsible framework for diversity and inclusivity for health technology**

R.A. Søråa

724

**The importance of a worker's perspective on digital technology**

A. Spänt Enbuske

746

**Happiness IT Platform for Active & Happy Ageing(AHA)**

Y.H Ro, Ph. D.

**TUE, 10/25 @ 10:30 AM**

**Session ID:2501**

**Symposium 3. Physical and Mental Health**

527

**Multidisciplinary perspectives on care burden and social value of care robot**

G.R.S. Hong (Convener)

**Care Difficulty of Activities of Daily Living among Formal Caregivers: Suggestion for Developing Caring Robot**

G.R.S. Hong, E.M. Oh, D. Chung, R.N. Choi, S.H. Moon

**Analysis of social value for nursing robots with the estimates of demand functions**

K. Park, H. Ryu, J. Kim, J. Lee, Y. Lee

**Effects of transfer assistive robots on care burden, burnout, and self-esteem in caregivers**

M.J. Kim, Y.S. Shin

**Biomechanical effects of a mechanical lift on the risk of low back injury during transfers from bed to wheelchair**

W. J. Choi, S. Lee, K. Lim

**Session ID:2502**

**Symposium 3. Physical and Mental Health**

757

**Effects of Companion Robots for Socially Isolated Older Adults**

O. Lee (Convener)

**Socially Assistive Humanoid Robots for Home Care: Investigating depressive symptoms and quality of life among impoverished and isolated older adults in South Korea**

O. Lee, I. Nam, H., Lee, Y. Chon,

**Verification of the Effectiveness of a Social Robot According to the Cognitive function of the older adults**

J. Jang, Y. Hwang, K. S. Kim, H. Jo

**What Hinders Robotic Care? Towards Situated Understanding of Elder Care Robots and Their Uses**

H. Shin, C. Jeon

## Session ID:2503

### Symposium 2. Mobility and Transport

793

**Technology use for assessing mobility among older adults**

M. Choi (Convener)

**Do older people drive differently? analysis of driving characteristics of taxi drivers on urban roads**

J. Lee, K. Jang

**Analysis of dangerous driving behavior per driver age with taxi driving log data**

A. Son, J.G. Lee

**Mobility evaluation system based on anomaly detection using an exercise exoskeleton robot**

C. Lee, B.M. Kang, S. Joo, Y. Kim, D.E. Kim, G.J. Kim, Y.M. Lim

**Evaluation method using muscle activation of resistance exercise with wearable robot**

B. Kang, C. Lee, S. Joo, J. Y. Kim, D.E. Kim, G.J. Kim, Y.M. Lim

## Session ID:2504

### Oral 1. Housing and Daily Living – (Smart Home)

566

**Building personalized virtual networks of care with the ADel electronic home assistant for older adults**

A. Moreno, J. Bernier

574

**Engaging citizen stakeholders on the topic of social robotics in healthcare**

R.A. Søråa, Y. Cheng, M. Kharas, S. Moratti

577

**Automated Modeling and Reasoning Approach for Context in Smart Homes based on Stochastic Analysis of Sensory Data**

J. W. Lee, A. Helal

769

**Residents' perception of the use of smart-home technologies in a retirement community**

A. P. Aguilera-Hermida

TUE, 10/25 @ 2:30 PM

## Session ID:2505

### Symposium 3. Physical and Mental Health

777

Care coordinator application to manage chronic disease in primary care

B.L. Cho

Information technology-supported integrated health service for older adults in long-term care settings: A cluster randomized controlled study

K.I. Kim

Technology based frailty prevention model with an eCBT application and a multisensor device

H.Jung, S.Yoon

## Session ID:2506

### Symposium 3. Physical and Mental Health

789

Application of artificial intelligence and digital technology to overcome dementia

J.K. Kim. (Convener)

PET-validated EEG-Machine Learning Algorithm Predicts Brain Amyloid Pathology in Pre-dementia Alzheimer's Disease

N.H. Kim, U. Park, S.W. Kang

The Role of Neuroimaging: Quantitative Approach for Prognosis/Staging/Analysis in Dementia Study

D. Kim, EY. Kim

SUPERBRAIN (The SoUth Korean study to PrEvent cognitive impaiRment and protect BRAIN health through lifestyle intervention in at-risk elderly people.) : a randomized controlled feasibility trial.

S. Han

## Session ID:2507

### Symposium 3. Physical and Mental Health

821

Early Prediction and Diagnosis of Alzheimer's Disease Based on Gwangju Alzheimer's and Related Dementia (GARD) Cohort

K. H. Lee (Convener)

Prediction of Amyloid  $\beta$  and Tau Pathology Using Deep Learning Based Artificial Intelligence System

K.H. Lee, J. Y Park, E. H. Seo, S.H. Won

Classification of Alzheimer's disease stages by analyzing prefrontal near-infrared signals during olfactory stimulation with machine learning

J.G. Kim, J.W. Kim

Converging multi-modal evidences for the primary prevention of Alzheimer's dementia

J.S. Gim, S.Lee, Y.T. Kim, K.H. Lee



## Session ID:2508

### Symposium 3. Physical and Mental Health – (The Korean Society for Gerontology)

808

**Convener: Joong-Jean Park (Korea University College of Medicine, President of The Korean Society for Gerontology)**

**Protein dynamics-based control of proteotoxicity in neurodegenerative diseases**

S.B. Lee (DGIST)

**Targeting cellular senescence in adipose tissue: a potential treatment for type 2 diabetes**

H.B. Jung, E.C. Kim, H.K. Sung, J.R. Kim, S.Y. Park(**Yeungnam University College of Medicine**)

**Drug repositioning for a potential drug to prevent muscle wasting in aged mice**

Y.I. Lee (DGIST)

## Session ID:2509

### Oral 4. Information and Communication – (Digital Divide)

522

**Building on trusted relationships to overcome resistance to ICTs**

P. P. Freddolino, F. Sun, D. Wishart, H. Kim, E. Godek, D. Parrett, M. Bentley, M. Huber

584

**Knowledge against indebtedness: financial education mediated by digital technologies**

J. Doll, L. Hollerweger

806

**Technology anxiety and technology enthusiasm vs digital ageism (Digital equity brought to the attention for sustainable and global aging).**

J. Berner, A.L. D. Moraes, P. Andersberg, J.S. Berglund

## Session ID:2510

### Oral 3. Physical and Mental Health

553

**The exercise load of the elderly with different physical capacity based on PCA and K-means clustering**

C.C. Lin, T.S. Cho, Y.S. Lin, JJ Lien, L.C. Kuo, F.C. Su

658

**A Study on the Factors Affecting Intention to Work Out in the Gym Among Middle-aged and Older People**

C.S. Lin, C.H. Wen

728

**Engagement in leisure activities: changes mediated by technologies**

T. M. Raymundo, R.G. Ferreira, F.M.S. Ribeiro, L.D. Bernardo

**TUE, 10/25 @ 4:30 PM**

## **Session ID:2511**

### **Symposium 3. Physical and Mental Health**

**542**

**The multifaceted construct of attitudes: Age- and gender-related perspectives on AI, robotics and their users**

S. Baisch (Convener)

**Attitudes towards artificial intelligence: An ageing and gender perspective**

T. Kolling (University of Siegen)

**Negative attitudes towards robots in the young and old**

M.F. Damholdt, J. Seibt, C. Vestergaard

**Stereotyping the user: How elders and formal caregivers perceive elder users of companion-type robots.**

S. Baisch, J. Klasen

**Stakeholder perspectives on care robot users at the intersection of age and gender: Empirical-ethical analysis.**

M. Weßel, N. Ellerich-Groppe, F. Koppelin, M. Schweda

## **Session ID:2512**

### **Symposium 4. Information and Communication**

**587**

**HAAL: a healthy ageing eco-system for people with dementia**

H.H. Nap, D.R.M. Lukkien, C.C. Lin, C.J. Lin, H. F. Chieh, Y.T. Wong, F.C. Su, R. Bevilacqua, G. Amabili, N. Morresi, G.M. Revel, S. Casaccia

**The co-design of an AI-driven healthy ageing eco-system: User requirements from dementia formal carers**

P. Koowattanataworn, N.E. Stolwijk, H.H. Nap, S. Ipakchian Askari, B.M. Hofstede, R. Bevilacqua, G. Amabili, A. Margaritini, C.C. Lin, C.J. Lin, H. F. Chieh, Y.T. Wong, F.C. Su

**Technical development of a holistic platform to monitor people with dementia and measure their well-being.**

N. Morresi, G.M. Revel, S. Casaccia

**A cross-cultural study on responsible AI innovation in the homecare of people with dementia**

D.R.M. Lukkien, H.H. Nap, N.E. Stolwijk, P. Koowattanataworn, W.P.C. Boon, E.H.M. Moors

## **Session ID:2513**

### **Symposium 6. Governance and Social Policy(Chair : Young-Ran Park(Kangnam University))**

**744**

**Ageing and Welfare Technology : Policy, Practice and Business in South Korea**

Y.R. Park (Convener)

**Local government-led care services for older adults using technology in community: current trends, issues, and implications**

S. W. Kim

**Evaluating Effectiveness of Safety and Care Services for Older Adults Living Alone using Living Lab**

J.W. Lim

**Ageing and Welfare Technology Industry Ecosystem for Small and Midsized Enterprises (SMEs)**

Y.H. Ro

## Session ID:2514

### Symposium 3. Physical and Mental Health

822

**Development of Multi-target therapy for Alzheimer's disease using human neural crest-derived stem cells**

J.Y. Lim, J.E. Lee, S.H. Yang, H.K. Lim, S.W. Kim

**Impact of transcranial direct current stimulation on cognitive function, brain functional segregation, and integration in patients with mild cognitive impairment according to amyloid-beta deposition and APOE ε4-allele**

D.W. Kang, S.M. Wang, T.Y. Kim, D.H. Kim, H.R. Na, N.Y. Kim, C.U. Lee, H.K. Lim

**Plasma Oligomeric Beta-amyloid is Associated with Cerebral Beta-amyloid Deposition in Cognitively Normal Older Adults.**

M.L. Fang, J.S. Sixsmith, R. Woolrych

## Session ID:2515

### Oral 3. Physical and Mental Health – (Care/Technology)

513

**A multifeatured mobile application to support paid and family caregivers**

A. Miguel-Cruz, H. Perez, C. Daum, A. Comeau, E. Rutledge, S. King, L. Liu.

520

**Informal caregiver burden of disabled residing in a community according to use of care device**

G.R.S. Hong, D.H. Won, E.J. Lee, D. Chung

554

**Biomechanical benefits of a mobile lift in reducing mechanical loads at the lower back during transfers**

S. Lee, K. Lim, W. J. Choi

558

**Older peoples' attitudes toward technology (TechPH), digital ageism and assistive technology devices**

J. Berner, A. Moraes Dallora, P. Anderberg, J. Sanmartin Berglund

## Session ID:2516

### Oral 7. Ohters - (Policy)

605

**Screen-based home care visits, care work and old age in the Scandinavian welfare state - the case of Denmark**

K. Gr nenberg, L. Hillersdal

636

**Perceptions of older adults about the concept of privacy and in terms of video-based AAL technologies.**

T. Mujirishvili, M. R. Martinez, J. C. Garcia, F. F. Revuelta

725

**A governmental programme to support well-being, ageing and care at home with new technologies**

H. Anttila, M. Anttila, M-L. Luoma

**WED, 10/26 @ 9:00 AM**

## **Session ID:2601**

### **Symposium 3. Physical and Mental Health**

515

**Current understandings and technologies for prevention of fall-related hip fracture in older adults**

W. J. Choi (Convener)

**Science of falling and injury in older adults – Do all falls lead to death?: Literature Review**

W. J. Choi, K. Lim, S. Kim, S. Lee

**Associations between Fall Characteristics and the Occurrence of Hip Fracture among Older Adults in Long-term Care**

Y. Yang, V. Komisar, A. Korall, S.N. Robinovitch

**Biomechanics of the trochanteric soft tissue during a fall and hip fracture in older adults**

K. Lim, W. J. Choi

**Promoting user compliance with wearable hip protectors in older adults through education and technology**

C.Y. Ho, X. Song, H. Mo, Y. Yang

## **Session ID:2602**

### **Symposium 4. Information and Communication**

679

**Digital inclusion for intergenerational solidarity**

S. Chung (Convener)

**Mobile application development for older adults to provide information on senior welfare centers: A case study**

S.D. Chung, A.Y. Lee, H.J. Lee

**Understanding the benefits and roles of mobile instant messaging use for the Korean elderly's mental health: An exploratory study focusing on emotional recovery and suicide prevention**

H.N. Lee, S.T. An, S.D. Chung

**E-health literacy and associated factors among Korean adults: Three age group differences**

S.Y. Park, S.D. Chung

## **Session ID:2603**

### **Symposium 4. Information and Communication**

999

## Session ID:2604

### Oral 1. Housing and Daily Living – (Assistive Technology)

507

**Technologies to age in place in community-dwelling older adults and family caregivers: A systematic review**

A. Moreno, K. Acevedo, H. Sun

523

**ICT and unpaid carers of people living with dementia: addressing engagement, detachment, and unmet needs**

J. Damant, D.King, M.Dangoor, P.Freddolino, B.Hu, K.Lorenz-Dant, R.Wittenberg

697

**GUARDIAN: An Assisted Living Social Robotics Eco-System**

H.H. Nap, D.R.M. Lukkien, Stal ter, M., R. Bevilacqua, G. Amabili, N. Morresi, G.M. Revel, S. Casaccia, J. Alberts, J. de Koning, A. De Masi, A. V. Naveira, K. Wac, B.M. Hofstede

711

**What 's in it for me? A retrospective cost-consequence study of a digital assistive technology**

K. Baudin, A. Sundstrom, C. Gustafsson, J. Borg

## Session ID:2605

### Oral 3. Physical and Mental Health - (Monitoring)

573

**The challenges of multi-disciplinary research in the design and adoption of self-managing technologies**

A. Eccles

686

**The Effect of Smart Health Care Systems as remote monitoring on Health-Related Quality of Life in the Elderly with Chronic Diseases**

C.H. Oak, H.K. Choi, K.Y. Lee

706

**Remote Monitoring and AI for Detecting Tardive Dyskinesia and Improving Patient Outcomes**

A.A. Sterns, L. Larson, B. Grimm, O.S. Muir

726

**Well-being and care at home with new technologies: perspectives of home care personnel**

M. Anttila, H. Anttila, M.L. Luoma

## Session ID:2606

### Oral 3. Physical and Mental Health - (Care)

604

**Assistive technology for older persons – analyses of data from WHO's Rapid Assistive Technology Assessment**

A.H. Eide, S. Müller, C. Khasnabis, J. Borg, M. Blakstad, H. Mannan, Antypas, K., M. Loeb, W. Zhang

650

**A Study on the Scooping and Serving Korean Food using Meal Assistance Robot**

J. S. Kim, W.-K. Song, S. R. Han, J. E. Heo, K. J. Lee

653

**Usability Evaluation of the Excretion Assist Care Robot for Caregivers and Experts**

J. E. Heo, K. Y. Cho, K. J. Lee, W.-K. Song, J. W. Hwang

<Online>

MON, 10/24 @ 10:00 PM

**Session ID:2421**

**On-Symposium 1. Housing and Daily Living – (Dementia Care)**

530

**Living at home with dementia beyond care; a perspective on the day and night situation**

C.A.M. Huisman (Convener)

**Available technology applications to support sleep for people with dementia and their informal caregiver**

C.A.M. Huisman, H.S.M. Kort

**A multi-stakeholder perspective on challenges during the night for people with dementia and their carers**

A.A.G. Sponselee, M.E. Nieboer, R.G.A. Brankaert

**Visual functioning and home modifications at home**

M.A. van Tilborg

**Brazilian initiatives aimed at the prevention and care of dementia**

T.M. Raymundo, L.D. Bernardo

**Session ID:2422**

**On-Oral 4. Information and communication – (Dialogue)**

497

**A Summary Report through Home Experiment on a Dialogue System for Older Adults**

S. Tokunaga, K. Tamura, M. Otake-Matsuura

552

**Integrating multiple dialogue agents using WebRTC for facilitating elderly mutual-aid at home**

S. Chen, M. Nakamura

575

**Supporting Home- and Community-Based Organization Activities through a Customized Videoconferencing Platform**

G. Mois, S. Shende, R. A. Mudar, D. Myers, W. A. Rogers

696

**Printed digital storytelling for older audiences**

D.M. Frohlich, L. Ferraz, P. Castro

## Session ID:2423

### On-Oral 3. Physical and Mental Health – (Robots)

691

**A social robot to promote intergenerational interaction in community service during coronavirus (COVID-19) pandemic**

Y.J. Mao, D.K.H. Lai, A.K.Y. Cheung, A.Y.C. Tam, D.S.K Cheung, J.C.W. Cheung

730

**A functional approach to measuring acceptance of social robots among elderly singletons in hong kong and singapore: protocol review of a purposeful sampling study**

C.K.Tan, W.Q. Lou, C.Y. Man, Y.Y. Mor

759

**Can telepresence robots empower people with mental health conditions and intellectual disabilities in everyday life?**

L. Küsters, M. Schmidt, B. Klein

760

**Development of a design framework to support pleasurable robot interactions for older adults**

S.A. Olatunji, W.A. Rogers

**MON, 10/24 @ 11:00 PM**

## Session ID:2424

### On-Symposium 7. Others – (Soci-Gerontechnology)

571

**Critical Engagements With Ageing and Technology – Why we need Socio-Gerontechnology.**

V. Gallistl, A. Peine (Conveners)

**Resourceful DIY solutions of older people as input for design**

L. Neven, J. Berschöld

**‘What’s the limit?’ Technologies for aging in place as imagined by young adults**

N.K. Dalmer, K. L. Ellison

**Why Care of all things? A critical analysis of Robotics in Care Settings**

A. Bischof, P. Graf

**The interrelatedness of digital practices and social connectedness: A study on older people’s smartphone use**

A. Peine, M. Fernández-Ardèvol, E. Loos, A. Rosales, D. Blanche

## Session ID:2425

### On-Oral 3. Physical and Mental Health – (VR/Medical)

563

**VR exercise game to keep the shoulder self-exercise going**

N. Takahashi, K. Ishihara

607

**VR & AI-based Mobile Apps in Enhancing Independence of Daily Function in Older Adults**

D.W.K. Man, F.H.Y. Lai

618

**Healthcare workers’ expectations of the Dyna-Form SMARTresponse application (HESA): A qualitative study**

## Session ID:2426

### On-Oral 7. Others – (Active aging)

532

**Active Aging Learning through Virtual Platform among the Middle-Aged and Older Adults in Taiwan: A Preliminary Finding**

H.C. Wei, A.T. Lin, G.L. Chen, S.T. Lin

562

**Decision Support System for the Fair Contribution of Efficiency Gains in the AAL Sector**

J. Bleja, S. Neumann, U. Grossmann

749

**The Effects of the Volunteering Characteristics and Social Support on Successful Aging of Older Adults: With a Focus on Mediating Effect of Volunteer Satisfaction and Gender Differences**

S.W. Lee

775

**Volunteering Characteristics, Social Support, and Successful Aging: Mediation Effects of Volunteer Satisfaction and Gender Differences**

S. Lee, J. Lee

**TUE, 10/25 @ 9:00 PM**

## Session ID:2521

### On-Symposium 4. Information and Communication

560

**Artist by technology: experiences of mature and older adults in Brazil during the pandemy**

J. Doll (Convener)

**CineSênior: stop motion films created by the older person**

B.K. Slodkowski, L.R. Machado, P.A. Behar

**Podcast Sexagenarte - A Vida Não Para: audio drama creations with old people in the pandemic**

R. Teixeira, S. Weber

**Some technology contributions to music as a serious leisure activity for mature and older adults**

E. Kohlrausch, J. Doll

## Session ID:2522

### On-Oral 3. Physical and Mental Health – (AI)

509

**Monitorization of Frailty and Dependence with wearables and machine learning**

M.J. Rodríguez-Fórtiz, F. García-Moreno, M. Bermúdez-Edo, J.M. Pérez-Mármol, J.L. Garrido-Bullejos

556

**Co-creating a conceptual AI model to promote personalized communication and engagement for people with dementia**

N. Hird, S. Palaniappan, S. Ghosh, Y. Shimizu, R. Ramanathan, V. Karunanidhi, E. Miura, Y. Tsubono

634

**Dual Depth Camera System for Bed exit and Fall Prevention of Hospitalized Elderly Patients**

T.K. Shea, Y.C. Tam, P.H. So, T.C. Chan, H.Y. Mak, K.H. Lai, M.W. Wong, Y.P. Zheng, C.W. Cheung



713

**Cognitive Behavioral Assistive Technology (CBAT) as AI for Super Aged Society**

M. Otake-Matsuura, M. S. Abe, T. Sekiguchi, S. Tokunaga, H. Sugimoto, T. M. Rutkowski, K. W. Miura

**Session ID:2523**

**On-Oral 4. Information and Communication – (Robot)**

510

**Development of RobotHub: Integration of External System to Group Conversation System for Older Adults**

S. Tokunaga, K. Fukumori, K. Tamura, K. Inoue, T. Kawahara and M. Otake-Matsuura

582

**Reflections about design principles of environments for elderly people living with dementia**

M.B. Dario, C.S.S. Castro

614

**Evaluating Technical Viability of a Loneliness Detector System for Older Adults from Rural Areas**

M. Jesús-Azabal, L. Mariano, J. Galán-Jiménez, J. García-Alonso

673

**Can a communication robot contribute to the good relationship between the elderly with dementia and the staff?**

T. Yamaguchi, Y. Saito, F. Nakamura, C. Maeda

**TUE, 10/25 @ 10:00 PM**

**Session ID:2524**

**On-Symposium 3. Physical and Mental Health – (Tech Innovations)**

593

**Health Technology Innovations**

R.F.L. Azevedo (Convener)

**Exploring the Effects of Indoor Air Quality on Sleep and Sleep Quality of Older People**

H.S.M. Kort, M.G.L.C. Loomans

**A technology innovation to improve hypertension medication adherence for older adults**

J.K. Lee, K.C. Insel, J.S. Nicholas, R.F.L. Azevedo, W.A. Rogers

**Socially assistive robot-based alerts on indoor and outdoor air-quality for patients with chronic obstructive pulmonary disease**

Y.S. Hwang, H.S. Jo, W.J. Kim, S. Sin

**Understanding the Application of Socially Assistive Robots in the Home to Support Healthy Aging**

G. Mois, L. G. L. Vergara, A. F. Afsar Ali, V. Rakshe, H. Mahajan, W. A. Rogers

## Session ID:2525

### On-Oral 3. Physical and Mental Health – (Movement)

545

#### Development of a PC game to support expiratory muscle training

K. Ishihara, K. Uekado, T. Fukuoka

568

#### Development of rehabilitation training system for spatial recognition and upper limb movement

T. Iwasaki, K.Ishihara, S.Ishihara, K.Matsuura

570

#### An electronic musical instrument approach to training of expiratory and hand muscle movements.

S. Mitsumasu, K. Ishihara

684

#### Influence of cardiovascular risk, hypertension and diabetes in accelerometry features

P. Bet, M.M. Chiudo, P.C. Castro, G.F. Costa, M.A. Ponti, M.S.M.P. Simões, V. Z. Dourado

## Session ID:2526

### On-Oral 4. Information and Communication – (Digital Use)

547

#### Connected: Mobile technologies and online music-making facilitate learning and a sense of belonging in older adults

A. Lynne, A. Creech

567

#### Digital engagement and quality of life of participants at a University of the Third Age

L.J. Lorenzi, P.A.R. Alvarez, P. Bet, P.C. Castro

585

#### Elder's ICT device usage / not-to-use: Survey comparison in Japan, Germany, Sweden, and the US

S. Ishihara, K. Ishihara

734

#### Role of technology in the relationship between grandparents and grandchildren in Asia

C.K Tan, Coco Liu

**TUE, 10/25 @ 11:00 PM**

## Session ID:2527

### On-Symposium 7. Others – (Gerontechnology)

517

#### The Role of Centers in Advancing Gerontechnology

N. Charness (Convener)

#### CREATE: Center for Research and Education on Aging and Technology Enhancement

S. J. Czaja, W. Boot, N. Charness, W. A. Rogers, J. Sharit

#### Enhancing Neurocognitive Health, Abilities, Networks, & Community Engagement

W.R. Boot, S.J. Czaja, N Charness, S.J. Czaja

**TechSAGE: Rehabilitation Engineering Research Center Technologies to Support Aging-in-Place for People with Long-term Disabilities**

J.A. Sanford, W. A. Rogers, T.L. Mitzner

**The Institute for Successful Longevity (ISL) at Florida State University, USA**

N Charness

**CHART: Collaborations in Health, Aging, Research, and Technology**

W. A. Rogers, A. Stanfield

**Session ID:2528**

**On-Oral 1. Housing and Daily Living – (Community)**

**537**

**Optimal numbers and locations of wearable sensors to enhance the performance of classification models that differentiate injurious versus non-injurious transfers**

K. Lim, S. Lee, W. J. Choi

**649**

**Multi-criteria evaluation of senior housing, based on their future needs**

A. Ptak-Wojciechowska, H. Kort, D. Kasraian, A. Gawlak

**689**

**Human-Computer Interaction in Analyzing Neighborhood Safety**

E. Hwang, A. J. Park, G. Han, E. Song

**755**

**Technology for Home-Delivered Meal Service for Rural Seniors Living Alone: Designing a Mobile App for the Meal Delivery Workers**

A. S.Y. Chang, S.T. Young, M.J. Yang, Y.Y. Lin

**Session ID:2529**

**On-Oral 7. Others – (Health)**

**569**

**Influence of Gender on Accelerometry Patterns**

P.C. Castro, M.M. Chiudo, P. Bet, M.A. Ponti, M.S.M.P. Simões, V. Z. Dourado

**586**

**Developing and selecting images to facilitate comprehension of hypertension educational materials for older adults**

R.F.L. Azevedo, M.T. Harris, Q. Nie, S.A. Al-Saleh, C. Smith, R. Maguire, W.A. Rogers

**708**

**Looking Back at Looking to the Future: Revisiting the 1983 NATO Symposium on Aging and Technological Advances**

H.L. Sterns, R.S. Sterns, A. Sterns

**762**

**A Pioneering Case Study That Applies Complementary and Alternative Medicine to Menopausal Women's Self-health Management**

H. O. Ma, C. J. Chang

## POSTER Session

- Type indicates your participation & presentation type. Please contact us if there is something wrong.
- Please prepare the pdf file for the online poster session which will upload all the poster file as well as in-person authors must bring your printed poster. (5minute long presentation record is optional)
- If you made the files, please upload(drop) the file at the below link.

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Type	Abstract ID	Title / Author
	499	<b>Digital competences model for elderly m-learning</b> <u>L.R Machado</u> , P.A. Behar
	501	<b>Feasibility Study of a Robot-Assisted Complex Upper and Lower Limb Rehabilitation System in Stroke Survivors</b> <u>JH Cho</u> , YM Choi, SY Lee, KT Kim
offline	508	<b>An interactive guideline to mitigate the risks associated with getting lost among persons living with dementia</b> <u>N.A. Neubauer</u> , L. McLennan, E. Leung, Daum, C., L. Zhang-Kennedy, L. Liu
online	514	<b>Visuomotor control of 3D circular tracking movement in a virtual reality space</b> <u>W. Choi</u> , L. Li, J.H. Lee
offline	524	<b>IoT based health monitoring system - Recent trends and directions</b> <u>C.M.B Ho</u> , J.Hana, S.J Park
offline	525	<b>Real-time Sleep Monitoring System for Nursing Hospitals</b> <u>C.M.B Ho</u> , J.Hana, S.J Hwang, S.J Park
offline	526	<b>Caregiver's experiences in caring for disabled persons using feeding assistive robots</b> <u>N. HIRAYAMA</u> , Y.S. Shin
offline	533	<b>Enhanced Behavior System of Service Robots based on BERT, CNN and DQN</b> <u>Y. Zhang</u> , Y. Sung
offline	534	<b>Development of a Leisure Aids Rental Service for Elderly through Service Scenario Analysis</b> <u>Y.S. Shin</u> , J.S. Hong, J.H. Kim
online	540	<b>Development of a Fall Prevention Device for Older Persons</b> <u>K. Abdul Rahman</u> , S.A. Ahmad, C. Wada, A. Ashari, A. Che Soh, A. A. Gopalai, S. Murugasen
offline	543	<b>Older cancer survivors' acceptance and compliance to web-based psychological interventions</b> <u>M. Mehlsen</u> , E. Nissen, M.F. Damholdt
online	555	<b>[omitted]: Pedagogical Strategies for Older Person Digital Inclusion</b> <u>L.R. Machado</u> , B.K. Slodkowski, C.B Sigal, D.F. Sampaio, T.F. Grande, J.S. Mendes, G.P. Meira da Silva, P.A. Behar
offline	559	<b>Companion Robot can be a Health Keeper for the Elderly: the Effects of Daily Use of Companion Robot on Medication Compliance</b> <u>J.C. Yun</u> , S.H. Yu, E. Yi, D.H. Park
online	572	<b>Developing Decision Support Algorithms for Use in a Digital Therapeutic System</b> <u>J.K. Lee</u> , J.S. Nicholas, A. Albadawi, K.C. Insel
	579	<b>Older Adults Perspectives on the Potential for Technology to Enhance Care in Academic Medical Centers</b> <u>C. VandeWeerd</u> , E. Sappington, M. Roberts, L. Poon
online	583	<b>A Comparative Usability Testing between a Web-based and Non-immersive VR Reminiscence Therapy for Persons with Dementia</b> <u>W. Sun</u> , R. Akhter, A. Quevedo, R. Liscano, D. Presas, S. Hornsburch, R. Shewaga
	596	<b>Cyberschool for grandparents: an innovative crowdfunded intergenerational educational program. Grandparents' baseline features according to web access</b> <u>M. Colombo</u> , A. Guaita, E. Rolandi
online	598	<b>Development of a web-based memory check tool using js Psych</b> <u>J. Maruta</u> , K. Uchida, S. Akada, S. Nogi, H. Kurozumi, K. Inoue.

	609	<b>Security vulnerability analysis for an improved anonymous authentication protocol for wearable health monitoring system in an aging society</b> <u>G. Eom</u> , H. Byeon, Y. Choi
online	610	<b>Cantonese-speaking Smart Doll for Institutionalized Elderlies with All-cause Dementia at Severe Stage</b> Y.T. <u>Ling</u> , M.C. Law, M.Y.M. Chan, P.Y. Wan, H.Y. Mak, Y.P. Zheng
	611	<b>Security vulnerability analysis for an improved anonymous authentication protocol for wearable health monitoring system in an aging society</b> <u>G. Eom</u> , H. Byeon, Y. Choi
	612	<b>Development of the Best Ensemble-based Machine Learning Classifier for Distinguishing Hypokinetic Dysarthria Caused by Parkinson's Disease from Presbyphonia and Comparison of Performance Measures</b> <u>H. Byeon</u>
offline	615	<b>A Study on Factors Affecting the Outcomes of Information Use by the Elderly - Focusing on the Digital Support</b> <u>J.H. Ko</u> , Y.M. Kim
offline	616	<b>Differences in Digital Capital according to Socio-demographic Characteristics of the Elderly.</b> <u>J.H. Ko</u> , Y.M. Kim
offline	620	<b>Chronic Disease Self-Management Interventions using Digital Health Technologies for Community-Dwelling Older Adults: A Systematic Review</b> S. Lee, M. Hwang, G. Kim, Y-H. Park
online	624	<b>Exploring the value of a proactive telecare system in older adults: a qualitative study</b> <u>L.Fothergill</u> , C.Holland, N. Hayes.
offline	625	<b>Emotion Analysis using the interaction with Companion Robot in the depressed elderly in the community</b> <u>H. Hong</u> , D.E. Shin,T.H. Kim.
online	626	<b>Two-year Longitudinal Relationships between Frailty, Cognitive Function, and Fall in Community-Dwelling Older Korean Adults</b> <u>N. Kim</u> , G.S. Kim, M. Park, M. Shim
offline	632	<b>Barriers and Facilitators of Self-management Using Digital Technology in Older Adults Living Alone</b> <u>G. Kim</u> , M. Hwang, S. Lee, Y.H. Park
offline	635	<b>The Impact of Social Capital, Economic resources and Health Behavior on Self-assessed Health of older people in South Korea.</b> <u>S.Y. Lee</u> , M.H. Cha, B.R. Hwang
offline	639	<b>A Study On The Formation Of The Elderly Life-Historical Sense Of Place In Urban Poverty</b> <u>J. Oak</u> , K.M. Kang
online	641	<b>Designing Smart Display Table for Senior Care Service based on Service Design Research</b> <u>Y.W. Jeong</u> , C.H. Kim, S.J Jeong, J.E. Song, B.R. Hwang
online	648	<b>ICT Usage and Health Behavior Among Korean Middle-Aged Men and Women: The Mediating Role of Self-Efficacy</b> <u>Y.S. Cha</u> , K. Kim, G. Han
offline	651	<b>A Descriptive Study of Digital Health Literacy and Internet Use of Older Adults Living Alone</b> <u>M. Hwang</u> , G. Kim, S. Lee, Y.H. Park
offline	652	<b>Study on Middle Aged People's Use of and Attitudes toward Kiosk</b> <u>M.J. Kim</u> , Y.A. Hong, Y.S. Kim, Y.J. Lee, G.R. Lee
online	656	<b>sEMG-based Hand Posture Recognition and Visual-Feedback Training</b> <u>J.M. Kim</u> , B.M. Koo, S.M. Yang, Y.J. Nam, Y.H. Kim
offline	657	<b>The Effects of the Solitray Deaths and Suicide Prevention Project on Emotional Vitality among Older Adults</b> <u>Y. Kim</u> , S.R. Noh
online	661	<b>Relationship between Body Positions, Body Mass Index and Pressure Injury among Elders: Using Artificial Intelligent</b> <u>J. Wang</u> , C.K. Chen, D.F. Shih
offline	663	<b>The effect of intervention using an emotional recognition coaching companion robot on the depressive elderly</b> <u>K.M. Kim</u> , B.H. Yoon,Y.H. Sea, S.H. Park, J.H Song, H.J. Yun
offline	664	<b>Improvement of the second NRC Smart Care Space based on stakeholders' participation</b> <u>Y.-Y. Cho</u> , K.J. Lee, J.E. Baek, W.-K. Song
offline	665	<b>Effects of Age and Familiarity on Visual Word Recognition in Korean: Evidence from a Web-based Large Scale Lexical Decision Task</b> <u>H. Baek</u> , P. C. Gordon, W. Choi
online	669	<b>Comparative literature review of assistive technology for dementia care in South Korea, Japan, and Thailand</b> <u>C. Thawisuk</u> , M.J. Kim, K. Inoue

online	670	<b>Testing Reciprocal Relationships between Loneliness and Self-Control among Middle-aged and Older Adults: A Random Intercept Cross-lagged Panel Model Using Daily Diary Data</b> <u>S.R. Noh</u>
online	671	<b>How to Measure the Effect of Reminiscence Group Therapy on Mute People with Dementia?: A Trial using a Facial Emotion Recognition Method</b> <u>X. Liu</u> , R. Yamazaki, H. Kase.
offline	674	<b>What's Needed to Make 'Aging in Place' for Healthy Old Age</b> <u>S. Han</u> , S. I. Nam
online	675	<b>The Pre-impact Fall Detection using the Quantization based on ResNet</b> B.M. Koo, J.M. Kim, S.M. Yang, S.H. Lee, M.H. Hong, and Y.H. Kim
offline	676	<b>Moderating Effects of Supervision on the Relationship Between Job Performance and Their Geriatric Social Work Competency Among Social Workers in the Individualized Support Service for Older Adults</b> Y. Kim, S.M. Park
offline	677	<b>Investigating non-face-to-face service awareness and needs of family caregivers with dementia patients during COVID-19 pandemic</b> M. Park, B.B. Dlamini, T.T.T. Giap, J. Jung, J. P. Kim, J. Kim, T.T. T. Doan
online	678	<b>Determination of Gait Parameters based on Multi-Sensors</b> <u>S.M. Yang</u> , J.M. Kim, B.M. Koo, Y.J. Nam, and Y.H. Kim
online	683	<b>The home environment as fall risk factors among community-dwelling frail older people: A systematic review</b> <u>M.K. Park</u> , G.S. Kim, N. Kim, M.S. Shim, J.J. Lee
offline	692	<b>A Conceptual Exploration of Cognition-Motor Dual Task Training for Effective Application in Community-dwelling Older Adults</b> <u>A. Lee</u> , S.H. Park, S.S. Kim, J.H. Kim, Y.R. Koo, H. Kwon, S.H. Ho, Y.H. Bae
offline	693	<b>Development of Usability Evaluation Indicator for a Rehabilitation Exercise Enhancement Device Using Cognitive-Physical combined intervention among the Elderly</b> <u>A. Lee</u> , S.H. Park, S.S. Kim, J.H. Kim, Y.H. Bae
online	694	<b>Digital Reminders for Everyday Activity Memory (DREAM): Initial Results from a Needs Assessment Study</b> <u>E.C. Sanders</u> , S. Zhang, W.R. Boot
offline	695	<b>Conceptual Exploration of Service Delivery System to Activate Physical Health Promotion of the Elderly</b> <u>A. Lee</u> , S.H. Park, S.S. Kim, J.H. Kim, Y.R. Koo, H. Kwon, S.H. Ho, Y.H. Bae,
online	703	<b>Effect of resistance exercise training combined with plant-based protein supplementation on the prevention of sarcopenia in the middle-aged and elderly</b> <u>P.C. Hsieh</u> , C.J. Chang, C.Y. Lin
online	707	<b>Adapting smart supportive technology for hospital use: a case report</b> <u>F. Knoefel</u> , L. Ault, C. Wilson, C. Trudel, M. Hamza, R. Wallace, M. Jaana, R. Goubran, H. Sveistrup, P. Tan, N. Thomas
offline	712	<b>The effect of digital literacy in the elderly on life satisfaction: Focusing on depression and social participation</b> <u>H. S. KIM</u> , J. S. KIM, K. Y. LEE
offline	714	<b>Preliminary results from a technology-integrated health and wellness intervention for seniors in an urban low-income community in Korea</b> J.Y. Yi, E. Kim, H. Choi, Y.I. Jung, H. Kim
online	719	<b>Innovative Design of Transformed Assistive Tableware (TAT) for the Elderly</b> <u>H. C. Y. Liu</u>
online	722	<b>AGING IN PLACE COMMUNITIES: AN AFFORDABLE ALTERNATIVE TO POTENTIALIZE LONGEVITY</b> N.Mello, A. Portigliatti
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online	729	<b>Digital Communities for Older Adults Deploying Human-Centered Technologies for Super-Smart Society</b> Y.Nameki, N.Kurashima, K.Chin
online	737	<b>Technologies for health and wellness in later life</b> R.White, A.Flynn, A.Sixsmith
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online	754	<b>Effectiveness Assessment of Patient-Centered Measures for Chronic Disease Management during COVID-19 Epidemic</b> A.H. Yang, H.M. Chang, H.L. Chen, S.H. Hsiao
offline	771	<b>Effect of VR/MR based Education Program for Managing Behavioral and Psychological Symptoms of Dementia</b> J.A. Song, H. Cheon, J. Kim, S. Jung., I. Kim, Y. Yang, J. Kim