ID	Article Link	Article Title	Author(s)	Services(RQ1)	Fields and Domains(RQ2)	Technologies and devices(RQ3)	Future solutions(RQ4)
1	https://ieeexplore.ieee.org/document/7589744	A smart low-consumption IoT framework for location tracking and its real application	Hao Tang; Jian Shi; Kai Le	Vehicle tracking, monitoring people with disabilities	Law enforcement, healthcare	BLE, GPS	GPS receiver integrated with TCP/IP stack (embedded into walking stick for people with disabilities)
2	https://ieeexplore.ieee.org/document/9265396	A Comparative Survey on Indoor Object Location Tracking Techniques and Technologies	Mina Asaduzzaman; Tan Kim Geok; Shohel Sayeed; Md Ahsanul Bari; Ferdous Hossain; Tan Choo Peng	Indoor location tracking, asset tracking	Asset management	Radio Frequency Identification Device (RFID), Ultra-Wideband (UWB), WiFi(WPS), Ultrasound, Infrared	
3	https://ieeexplore.ieee.org/document/7590064	Accurate Indoor Location Tracking Exploiting Ultrasonic Reflections	Kang-Wook Kim; Jihye Kwon; Chang-Gun Lee; Junghee Han	Indoor location tracking	Nursing homes, child care facilities	Time difference of arrivals using Radio Frequency or ultrasonic signals	Measuring time difference of arrivals exploiting ultrasonic reflections
4	https://ieeexplore.ieee.org/document/9152857	A Beacon-Based Indoor Positioning System for Location Tracking of Patients in a Hospital	Georgi Shipkovenski; Teodor Kalushkov; Emiliyan Petkov; Vladislav Angelov	Indoor positioning, tracking patients positions	Heathcare, wearables	Bluetooth Low Energy beacons with specialized bracelets that use beacon signals as reference points, GPS, GLONASS, GALILEO, Wi-Fi, RFID	
5	https://ieeexplore.ieee.org/document/7919537	An efficient indoor location tracking and navigation system using simple magnetic map matching	P K Binu; R Akhil Krishnan; A Pranav Kumar	Path generation, indoor location tracking	Navigation	Wi-Fi, Bluetooth, RFID	Magnetic field identification technology (using the naturally occurring magnetic fields inside concrete buildings)
6	https://ieeexplore.ieee.org/document/9121128	Real-time Location Tracker for Critical Health Patient using Arduino, GPS Neo6m and GSM Sim800L in Health Care	Pratik Kanani; Mamta Padole	Outdoor location tracking, locating crital health patients, wild animals, school students and transport services	Healthcare, asset management	GPS	
7	https://ieeexplore.ieee.org/document/8304587	Accurate Location Tracking From CSI-Based Passive Device-Free Probabilistic Fingerprinting	Shuyu Shi; Stephan Sigg; Lin Chen; Yusheng Ji	Indoor localization, continous tracking of the tracjectory of a moving object	Asset management	Wi-Fi	Device-free passive (DfP) indoor location tracking system that adopts channel state information (CSI) readings from off-the-shelf WiFi 802.11n wireless cards
8	https://ieeexplore.ieee.org/document/8978639	A Bluetooth Location-based Indoor Positioning System for Asset Tracking in Warehouse	C. K. M. Lee; C. M. Ip; Taezoon Park; S. Y. Chung	Indoor positioning, asset tracking	Logistics, asset management	Global Positioning System (GPS), Radio Frequency Identification (RFID) and ZigBee; Bluetooth low energy	Kalman-LULU filter in the signal processing stage
9	https://ieeexplore.ieee.org/document/8326225	IoT based indoor location detection system for smart home environment	Rajdeep Kumar Nath; Rajnish Bajpai; Himanshu Thapliyal	Indoor location detection for smart home environment, reliable care and safety from home, wireless and off-site feedback to medical personnel (caregivers)	Healthcare, smart home, wearables, smart city	Bluetooth, Wi-Fi	Amazon Echo as the voice interface and HC-SR04 ultrasonic sensor
10	https://ieeexplore.ieee.org/document/8835224	Elderly Action Recognition System with Location and Motion Data	Nour Eddin Tabbakha; Wooi-Haw Tan; Chee-Pun Ooi	Elderly action recognition, indoor localization	Healthcare, smart home, wearables	Bluetooth Low Energy beacon and wearable scanners, inertial sensors	The action recognition system to detect different types of motion (walking, sitting, falling) with BLE technology to detect patients location
11	https://ieeexplore.ieee.org/document/8533798	Integration of Sensors for Location Tracking using Internet of Things	Shital D. Bachpalle; Minakshi R. Shinde	Asset tracking	Asset management	GPS, RFID, WLAN	
12	https://ieeexplore.ieee.org/document/8567572	Embracing Spatial Awareness for Reliable WiFi-Based Indoor Location Systems	Jingao Xu; Zheng Yang; Hengjie Chen; Yunhao Liu; Xiancun Zhou; Jianbo Li; Nicholas Lane	Indoor localization		Wi-Fi, RFID, visual image processing, inertial sensors	Recieved Signal Strength (RSS) Spatial Gradient (RSG) matrix for enhanced Wi-Fi fingerprints
13	https://ieeexplore.ieee.org/document/8783167	Location Privacy and Changes in WiFi Probe Request Based Connection Protocols Usage Through Years	Ante Dagelić; Toni Perković; Mario Čagalj	Indoor tracking, indoor localization, path generation	Marketing, navigation	Wi-Fi	Deanonymization of Wi-Fi traces, connection to real users for more efficient tracking

14	https://ieeexplore.ieee.org/document/8710862	Location Tracking and Forensic Analysis of Criminal Suspects' Footprints	Meng-Hsuan Tsai; Jia-Ning Luo; Ming-Hour Yang; Nai-Wei Lo	Outdoor tracking, precision tracking, indoor localization	Law enforcement, navigation, marketing	Mobile network, GPS, visual image processing, infrared, RFID, Wi-Fi	Auxiliary observation nodes to eavesdrop on the packets sent from criminal suspects' devices to wireless base stations, determining the corresponding signal strengths
15	https://ieeexplore.ieee.org/document/8588014	Develop An Indoor Space Ontology For Finding Lost Properties for Location-Based Service of Smart City	Sanya Khruahong; Xiaoying Kong; Kumbesan Sandrasegaran; Li Liu	Asset tracking, indoor tracking, path generation	Smart city, marketing, asset management, social networking, activity monitoring	GPS, BLE, Wi-Fi, RFID	
16	https://ieeexplore.ieee.org/document/8597683	High Stability Tracking with Sparse Location Information	Yangpu Cao; Yuan Chen; Yaoran Sun; Sailing He	Asset tracking	Asset management	Visual image processing, Ultra-Wideband (UWB)	Correcting error tracking by matching the target location from the image tracker and the UWB device