

# Tsung-Yen Chan

## List of Publications by Year in descending order

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Version: 2024-02-01

140  
papers

2,144  
citations

394421

19  
h-index

302126

39  
g-index

140  
all docs

140  
docs citations

140  
times ranked

1719  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Things in the air: tagging wearable IoT information on drone videos. Discover Internet of Things, 2021, 1, 1.  | 4.8  | 17        |
| 2  | Enhanced scheduling schemes with energy conservation for dynamic point selection in cloud radio access networks. Wireless Networks, 2020, 26, 1519-1534. | 3.0  | 1         |
| 3  | Magnetic Field-Based Localization in Factories Using Neural Network With Robotic Sampling. IEEE Sensors Journal, 2020, 20, 13110-13118.                  | 4.7  | 18        |
| 4  | On Optimizing Signaling Efficiency of Retransmissions for Voice LTE. , 2020, , .   |      | 0         |
| 5  | Achieving Ultra Energy-efficient and Collision-free Data Collection in Wake-up Radio Enabled mIoT. , 2020, , .   |      | 2         |
| 6  | Fusing Multi-Sensory Data for Precision Indoor Localization. , 2020, , .   |      | 0         |
| 7  | Sensor-based Badminton Stroke Classification by Machine Learning Methods. , 2020, , .  |      | 4         |
| 8  | Who Takes What: Using RGB-D Camera and Inertial Sensor for Unmanned Monitor. , 2019, , .   |      | 1         |
| 9  | Design and Implementation of Image Electronic Fence with 5G technology for Smart Farms. , 2019, , .  |      | 6         |
| 10 | Resolving Intra-Class Imbalance for GAN-Based Image Augmentation. , 2019, , .  |      | 3         |
| 11 | Enabling Identity-Aware Tracking via Fusion of Visual and Inertial Features. , 2019, , .   |      | 10        |
| 12 | Pedestrian Tracking by Acoustic Doppler Effects. IEEE Sensors Journal, 2019, 19, 3893-3901.  | 4.7  | 9         |
| 13 | ID-Free Multigroup Cardinality Estimation for Massive RFID Tags in IoT. , 2019, , .  |      | 1         |
| 14 | A Comprehensive Multisensor Dataset Employing RGBD Camera, Inertial Sensor and Web Camera. , 2019, , .   |      | 3         |
| 15 | Multi-Slot Allocation Protocols for Massive IoT Devices With Small-Size Uploading Data. IEEE Wireless Communications Letters, 2019, 8, 448-451.          | 5.0  | 10        |
| 16 | How to Reduce Unexpected eMBMS Session Disconnection: Design and Performance Analysis. IEEE Wireless Communications Letters, 2018, 7, 126-129.           | 5.0  | 2         |
| 17 | Efficient and Consistent Flow Update for Software Defined Networks. IEEE Journal on Selected Areas in Communications, 2018, 36, 411-421.                 | 14.0 | 14        |
| 18 | A Hint-Based Random Access Protocol for mMTC in 5G Mobile Network. , 2018, , .   |      | 0         |

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|----|---|-----|-----------|
| 19 | Energy-Efficient Uplink Scheduling for Ultra-Reliable Communications in NB-IoT Networks. , 2018, , .  |     | 11        |
| 20 | Cooperative Sensing Data Collection and Distribution with Packet Collision Avoidance in Mobile Long-Thin Networks. Sensors, 2018, 18, 3588. | 3.8 | 9         |
| 21 | On Scalable Service Function Chaining with $\mathcal{O}(1)$ Flowtable Entries. , 2018, , .  |     | 4         |
| 22 | Appliance Control by TDoA-based Localization and Gesture Recognition. , 2018, , .   |     | 2         |
| 23 | Eye on You: Fusing Gesture Data from Depth Camera and Inertial Sensors for Person Identification. , 2018, , .                               |     | 13        |
| 24 | Wireless location tracking by a sensor-assisted particle filter and floor plans in a 2.5-D space. , 2018, , .                               |     | 6         |
| 25 | Data offloading for dynamic point selection in cloud radio access networks (C-RAN). , 2018, , .   |     | 2         |
| 26 | Spatial and Temporal Aggregation for Small and Massive Transmissions in LTE-M Networks. , 2017, , .   |     | 0         |
| 27 | eHint: An Efficient Protocol for Uploading Small-Size IoT Data. , 2017, , .   |     | 10        |
| 28 | Energy-Efficient Dynamic Point Selection for Cloud Radio Access Networks (C-RAN). , 2017, , .   |     | 5         |
| 29 | Give me a hint: An ID-free small data transmission protocol for dense IoT devices. , 2017, , .  |     | 4         |
| 30 | The hint protocol: Using a broadcast method to enable ID-free data transmission for dense IoT devices. , 2017, , .                          |     | 6         |
| 31 | A Dynamic Hybrid Counting Procedure for eMBMS of 3GPP. , 2017, , .  |     | 0         |
| 32 | Analyzing students' attention in class using wearable devices. , 2017, , .  |     | 20        |
| 33 | Design and implement a mobile badminton stroke classification system. , 2017, , .   |     | 8         |
| 34 | Applying machine learning to head gesture recognition using wearables. , 2017, , .  |     | 6         |
| 35 | Flowtable-Free Routing for Data Center Networks: A Software-Defined Approach. , 2017, , .   |     | 6         |
| 36 | Qnalyzer: Queuing Recognition Using Accelerometer and Wi-Fi Signals. , 2017, , .  |     | 2         |

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|----|---|-----|-----------|
| 37 | iToy: A LEGO-like solution for small scale IoT applications. , 2017, , .  |     | 0         |
| 38 | Parallel and local diagnostic algorithm for wireless sensor networks. , 2017, , .   |     | 2         |
| 39 | r-Hint: A message-efficient random access response for mMTC in 5G networks. , 2017, , .   |     | 3         |
| 40 | Constructing a 3D Multiple Mobile Medical Imaging System through Service Science, Management, Engineering and Design. Systems, 2017, 5, 5.  | 2.3 | 2         |
| 41 | M2M Encountering: Collaborative Localization via Instant Inter-Particle Filter Data Fusion. IEEE Sensors Journal, 2016, 16, 5715-5724.  | 4.7 | 16        |
| 42 | An adaptive Paris Metro Pricing scheme for mobile data networks. International Journal of Network Management, 2016, 26, 422-434.  | 2.2 | 2         |
| 43 | BLE-based collaborative indoor localization with adaptive multi-lateration and mobile encountering. , 2016, , .   |     | 10        |
| 44 | Guest Editorial: Special Section on Emerging Topics in the Design of High Performance Internet Routers. IEEE Transactions on Emerging Topics in Computing, 2016, 4, 177-178.            | 4.6 | 0         |
| 45 | Two-Phase Multicast DRX Scheduling for 3GPP LTE-Advanced Networks. IEEE Transactions on Mobile Computing, 2016, 15, 1839-1849.  | 5.8 | 10        |
| 46 | Inference of Conversation Partners by Cooperative Acoustic Sensing in Smartphone Networks. IEEE Transactions on Mobile Computing, 2016, 15, 1387-1400.                                  | 5.8 | 7         |
| 47 | Range-Free Mobile Actor Relocation in a Two-Tiered Wireless Sensor and Actor Network. ACM Transactions on Sensor Networks, 2016, 12, 1-40.  | 3.6 | 8         |
| 48 | Demo abstract: A video-based metropolitan positioning system with centimeter-grade localization for VANETs. , 2015, , .   |     | 0         |
| 49 | A dynamic reservation scheme in online charging system for Family Shared Plan. , 2015, , .  |     | 0         |
| 50 | Discovering Phase Timing Information of Traffic Light Systems by Stop-Go Shockwaves. IEEE Transactions on Mobile Computing, 2015, 14, 58-71.  | 5.8 | 16        |
| 51 | Optimal Path Planning With Spatial-Temporal Mobility Modeling for Individual-Based Emergency Guiding. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2015, 45, 1491-1501. | 9.3 | 23        |
| 52 | On common profile matching among multiparty users in mobile D2D social networks. , 2014, , .  |     | 1         |
| 53 | Continuous Human Location and Posture Tracking by Multiple Depth Sensors. , 2014, , .   |     | 2         |
| 54 | Smarter IoT. , 2014, , .  |     | 0         |

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|----|---|------|-----------|
| 55 | Self-Contained Localization without Auxiliary Signals on Smart Devices. , 2014, , .   |      | 0         |
| 56 | On local cache management strategies for Mobile Augmented Reality. , 2014, , .  |      | 5         |
| 57 | Distributed address assignment with address borrowing for ZigBee networks. , 2014, , .  |      | 1         |
| 58 | Improvements in dental care using a new mobile app with cloud services. Journal of the Formosan Medical Association, 2014, 113, 742-749.  | 1.7  | 22        |
| 59 | Energy-conserving data gathering by mobile mules in a spatially separated wireless sensor network. Wireless Communications and Mobile Computing, 2013, 13, 1369-1385.               | 1.2  | 8         |
| 60 | Enhanced cooperative access class barring and traffic adaptive radio resource management for M2M communications over LTE-A. , 2013, , .   |      | 18        |
| 61 | Deploying Sensors for Gravity Measurement in a Body-Area Inertial Sensor Network. IEEE Sensors Journal, 2013, 13, 1522-1533.  | 4.7  | 6         |
| 62 | Design of a self-portrait application with sensor-assisted guiding for smart devices. , 2013, , .   |      | 1         |
| 63 | Energy-efficient DRX scheduling for multicast transmissions in 3GPP LTE-Advanced wireless networks. , 2013, , .   |      | 6         |
| 64 | Dynamic Traffic Control with Fairness and Throughput Optimization Using Vehicular Communications. IEEE Journal on Selected Areas in Communications, 2013, 31, 504-512.              | 14.0 | 41        |
| 65 | Sleep scheduling in IEEE 802.16j relay networks. , 2013, , .  |      | 1         |
| 66 | A lane-level dynamic traffic control system for driving efficiency optimization based on vehicular networks. , 2013, , .  |      | 0         |
| 67 | Augmented reality assisted photo positioning for mobile devices. , 2013, , .  |      | 0         |
| 68 | Automatic parameter selection for the ZigBee distributed address assignment mechanism. , 2013, , .  |      | 3         |
| 69 | Guest Editorial: Networking Challenges in Cloud Computing Systems and Applications. IEEE Journal on Selected Areas in Communications, 2013, 31, 2593-2595.                          | 14.0 | 1         |
| 70 | VirtualTouch: A finger glove to simulate touch screen commands. , 2012, , .   |      | 0         |
| 71 | LEGS: A Load-balancing Emergency Guiding System based on wireless sensor networks. , 2012, , .  |      | 8         |
| 72 | Using Rotatable and Directional (R&D) Sensors to Achieve Temporal Coverage of Objects and Its Surveillance Application. IEEE Transactions on Mobile Computing, 2012, 11, 1358-1371. | 5.8  | 35        |

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|----|--|-----|-----------|
| 73 | Evacuation Time Analysis and Optimization for Distributed Emergency Guiding Based on Wireless Sensor Networks. , 2012, , .   |     | 12        |
| 74 | A flexible analysis and prediction framework on resource usage in public clouds. , 2012, , .   |     | 2         |
| 75 | A Path-Connected-Cluster Wireless Sensor Network and Its Formation, Addressing, and Routing Protocols. IEEE Sensors Journal, 2012, 12, 2135-2144.  | 4.7 | 32        |
| 76 | Traffic-attracted mobile relay deployment in a wireless ad hoc network. , 2012, , .  |     | 0         |
| 77 | Angle Object Coverage Problem in a Wireless Sensor Network. IEEE Sensors Journal, 2012, 12, 3408-3416.   | 4.7 | 30        |
| 78 | Pedestrian activity detection in a multi-floor environment by a smart phone. , 2012, , .   |     | 1         |
| 79 | Efficient Packet Recovery Using Prioritized Network Coding in DVB-IPDC Systems. IEEE Communications Letters, 2012, 16, 382-385.  | 4.1 | 4         |
| 80 | AR-Based Positioning for Mobile Devices. , 2011, , .   |     | 11        |
| 81 | Data Compression by Temporal and Spatial Correlations in a Body-Area Sensor Network: A Case Study in Pilates Motion Recognition. IEEE Transactions on Mobile Computing, 2011, 10, 1459-1472. | 5.8 | 47        |
| 82 | A Walking Velocity Update technique for pedestrian dead-reckoning applications. , 2011, , .  |     | 7         |
| 83 | Vehicular traffic information dissemination for WAVE/DSRC networks. , 2011, , .  |     | 2         |
| 84 | From barren to beautiful: A pattern-matching localization scheme integrating heterogeneous network data. , 2011, , .   |     | 0         |
| 85 | Discriminant Minimization Search for Large-Scale RF-Based Localization Systems. IEEE Transactions on Mobile Computing, 2011, 10, 291-304.  | 5.8 | 59        |
| 86 | A channel management protocol for multi-channel, single-radio 802.11-based wireless mesh networks. , 2011, , .   |     | 1         |
| 87 | An Infrastructure-less Framework for Preventing Rear-End Collisions by Vehicular Sensor Networks. IEEE Communications Letters, 2011, 15, 358-360.  | 4.1 | 37        |
| 88 | On Tile-and-Energy Allocation in OFDMA Broadband Wireless Networks. IEEE Communications Letters, 2011, 15, 1284-1287.  | 4.1 | 1         |
| 89 | A Cross-Layer Framework for Overhead Reduction, Traffic Scheduling, and Burst Allocation in IEEE 802.16 OFDMA Networks. IEEE Transactions on Vehicular Technology, 2011, 60, 1740-1755.      | 6.3 | 16        |
| 90 | An augmented reality based group communication system for bikers using smart phones. , 2011, , .   |     | 1         |

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|-----|--|-----|-----------|
| 91  | On Optimization of Accelerometers Deployment for Human Posture Tracking. , 2011, , .   |     | 2         |
| 92  | Managing Power Saving Classes in IEEE 802.16 Wireless MANs: A Fold-and-Demultiplex Method. IEEE Transactions on Mobile Computing, 2011, 10, 1237-1247.                         | 5.8 | 19        |
| 93  | iMace: Protecting Females from Sexual and Violent Offenders in a Community via Smartphones. , 2011, , .  |     | 7         |
| 94  | Energy-efficient network selection with mobility pattern awareness in an integrated WiMAX and WiFi network. International Journal of Communication Systems, 2010, 23, 213-230. | 2.5 | 42        |
| 95  | Simple and Regular Mini-Slot Scheduling for IEEE 802.16d Grid-Based Mesh Networks. , 2010, , .   |     | 5         |
| 96  | Streetcast: An Urban Broadcast Protocol for Vehicular Ad-Hoc Networks. , 2010, , .   |     | 24        |
| 97  | Sensor-Aided Personal Navigation Systems for Handheld Devices. , 2010, , .   |     | 12        |
| 98  | People help people: A pattern-matching localization with inputs from user community. , 2010, , .   |     | 5         |
| 99  | Using Mobile Mules for Collecting Data from an Isolated Wireless Sensor Network. , 2010, , .   |     | 13        |
| 100 | Energy-Balanced Dispatch of Mobile Sensors in a Hybrid Wireless Sensor Network. IEEE Transactions on Parallel and Distributed Systems, 2010, 21, 1836-1850.                    | 5.6 | 83        |
| 101 | An application of sensor networks with data mining to patient controlled analgesia. , 2010, , .  |     | 3         |
| 102 | Autonomous Light Control by Wireless Sensor and Actuator Networks. IEEE Sensors Journal, 2010, 10, 1029-1041.  | 4.7 | 85        |
| 103 | Multi-screen cyber-physical video game: An integration with body-area inertial sensor networks. , 2010, , .  |     | 9         |
| 104 | Dynamic water gate assignment scheme for data aggregation in long-thin sensor networks. , 2010, , .  |     | 4         |
| 105 | ZigBee Wireless Sensor Network and Its Network Formation Problem. , 2010, , 181-196.   |     | 0         |
| 106 | Indoor localization: Automatically constructing today's radio map by iRobot and RFIDs. , 2009, , .   |     | 12        |
| 107 | XOR-Forwarding for Wireless Networks. , 2009, , .  |     | 5         |
| 108 | Exploiting Spectral Reuse in Routing, Resource Allocation, and Scheduling for IEEE 802.16 Mesh Networks. IEEE Transactions on Vehicular Technology, 2009, 58, 301-313.         | 6.3 | 23        |

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|-----|--|-----|-----------|
| 109 | Cross-Layer, Energy-Efficient Design for Supporting Continuous Queries in Wireless Sensor Networks: A Quorum-Based Approach. <i>Wireless Personal Communications</i> , 2009, 51, 411-426.      | 2.7 | 13        |
| 110 | The Orphan Problem in ZigBee Wireless Networks. <i>IEEE Transactions on Mobile Computing</i> , 2009, 8, 1573-1584.   | 5.8 | 74        |
| 111 | The Beacon Movement Detection Problem in Wireless Sensor Networks for Localization Applications. <i>IEEE Transactions on Mobile Computing</i> , 2009, 8, 1326-1338.                            | 5.8 | 27        |
| 112 | A vehicular wireless sensor network for CO <sub>2</sub> monitoring. , 2009, , .  |     | 21        |
| 113 | An Energy-Efficient Handover Scheme with Geographic Mobility Awareness in WiMAX-WiFi Integrated Networks. , 2009, , .  |     | 20        |
| 114 | Non-location-based Mobile Sensor Relocation in a Hybrid Static-Mobile Wireless Sensor Network. , 2009, , .   |     | 7         |
| 115 | VS <sup>3</sup> : A Vehicular Surveillance and Sensing System for security applications. , 2009, , .   |     | 4         |
| 116 | iLamp: A sensor-enhanced lamp with surface-tracking capability based on light intensity. , 2009, , .   |     | 0         |
| 117 | Design and analysis of contention-based request schemes for best-effort traffics in IEEE 802.16 networks. <i>IEEE Communications Letters</i> , 2008, 12, 602-604.                              | 4.1 | 10        |
| 118 | Efficient Placement and Dispatch of Sensors in a Wireless Sensor Network. <i>IEEE Transactions on Mobile Computing</i> , 2008, 7, 262-274.   | 5.8 | 179       |
| 119 | Two-Way Beacon Scheduling in ZigBee Tree-Based Wireless Sensor Networks. , 2008, , .   |     | 9         |
| 120 | Address Assignment and Routing Schemes for ZigBee-Based Long-Thin Wireless Sensor Networks. <i>IEEE Vehicular Technology Conference</i> , 2008, , .  | 0.4 | 44        |
| 121 | Compression and Storage Schemes in a Sensor Network with Spatial and Temporal Coding Techniques. <i>IEEE Vehicular Technology Conference</i> , 2008, , .                                       | 0.4 | 13        |
| 122 | A WSN-Based Intelligent Light Control System Considering User Activities and Profiles. <i>IEEE Sensors Journal</i> , 2008, 8, 1710-1721.   | 4.7 | 151       |
| 123 | Design and Implementation of a WSN-Based Intelligent Light Control System. , 2008, , .   |     | 9         |
| 124 | A Scrambling Method for Fingerprint Positioning Based on Temporal Diversity and Spatial Dependency. <i>IEEE Transactions on Knowledge and Data Engineering</i> , 2008, 20, 678-684.            | 5.7 | 72        |
| 125 | Exploiting Spectral Reuse in Resource Allocation, Scheduling, and Routing for IEEE 802.16 Mesh Networks. <i>Vehicular Technology Conference-Fall (VTC-FALL), Proceedings, IEEE</i> , 2007, , . | 0.0 | 12        |
| 126 | Supporting Multimedia Communication within an 802.11g Ad-hoc Network. , 2007, , .  |     | 1         |



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|-----|--|-----|-----------|
| 127 | Design and Implementation of a SIP-Based Mobile and Vehicular Wireless Network With Push Mechanism. IEEE Transactions on Vehicular Technology, 2007, 56, 3408-3420.  | 6.3 | 18        |
| 128 | A Quorum-based Mechanism as an Enhancement to Clock Synchronization Protocols for IEEE 802.11 MANETs. IEEE Communications Letters, 2007, 11, 313-315.                | 4.1 | 4         |
| 129 | A Seamless Handoff Mechanism for DHCP-Based IEEE 802.11 WLANs. IEEE Communications Letters, 2007, 11, 665-667.   | 4.1 | 12        |
| 130 | A Group Tour Guide System with RFIDs and Wireless Sensor Networks. , 2007, , .   |     | 6         |
| 131 | GeoAds: A Middleware Architecture for Music Service with Location-Aware Advertisement. , 2007, , .   |     | 17        |
| 132 | Cluster-Enhanced Techniques for Pattern-Matching Localization Systems. , 2007, , .   |     | 28        |
| 133 | Detecting Movement of Beacons in Location-Tracking Wireless Sensor Networks. Vehicular Technology Conference-Fall (VTC-FALL), Proceedings, IEEE, 2007, , .           | 0.0 | 5         |
| 134 | Exploring Load-Balance to Dispatch Mobile Sensors in Wireless Sensor Networks. , 2007, , .   |     | 29        |
| 135 | Efficient in-network moving object tracking in wireless sensor networks. IEEE Transactions on Mobile Computing, 2006, 5, 1044-1056.                                  | 5.8 | 190       |
| 136 | Visualization Design for Location-Aware Services. , 2006, , .  |     | 2         |
| 137 | An efficient MAC protocol for multi-channel mobile ad hoc networks based on location information. International Journal of Communication Systems, 2006, 19, 877-896. | 2.5 | 9         |
| 138 | Fully power-aware and location-aware protocols for wireless multi-hop ad hoc networks. , 0, , .  |     | 23        |
| 139 | A Fast Handoff Mechanism for IEEE 802.11 and IAPP Networks. , 0, , .   |     | 43        |
| 140 | Message-Efficient In-Network Location Management in a Multi-sink Wireless Sensor Network. , 0, , .   |     | 3         |