

Literature Survey

Title & Author(s)	Year	Technique(s)	Findings/Pros/Cons
Fire Safety Management Information System Design for Key Social Organizations Xu Fang, Zhang Di, Wang Jun	2014	Web Browser/Server mode	The fire safety management information system for organizations can further extend the functions of fire remote monitoring control system and enable a wider range of the departments and personnel who need remote fire monitoring and control information to have real-time access to the information of interest.
Building Fire Rescue with Evacuation Management Information System and its application XU Tao, MAO Guozhu*, LI Xin, ZHAO Lin	2009	EVACNET4, MAPGIS	The path selection was achieved by GIS with visualization of the occupant distribution. The communication network was established between the building and the fire-fighting system of the area, combined with WebGIS. With the basic information of the building transmitting to the fire safety systems, the fire safety systems can provide fast, efficient rescue measures when the fire breaks out.
Discussion of Society Fire-fighting Safety Management Internet of Things Technology System WANG Jun, ZHANG Di, LIU Meng, XU Fang, SUI Hu-lin, YANG Shu-feng	2014	IOT systematic framework	Improved dynamic regulatory capacity of fire-fighting facilities, expanding the fire-fighting supervision range, and providing auxiliary information support for fire-fighting rescue.
Agent based data collecting in a forest fire monitoring system Ljiljana Bodrožić, Darko Stipaničev, Maja Štula	2006	HVAC	Modified smoke control system can slow down smoke propagation compartments and corridors by combined action of door controller and HVAC controller based on fire information and human information. In compartments smoke height can be kept in some height and toxic concentration can be reduced
Study on an Intelligent Smoke Control System in a Modern Building Yan-yan CHUa, Dong LIANG	2014	Split-Dalmatia Country Integral Forest Monitoring System	The novelty of our approach is in the application of unified agent-based methodologies for data collecting. The multi-agent system responsible for communication between server units and monitoring units was designed. The advantage of such

			approach is better control of overall system because of its modularity,
An Adaptive Intelligent Architecture for Fire Detection and Fire Management T. Alwast and C. H. C. Leung	1997	IBM agent building Environment	Agents are able to adapt to changes, and their use is particularly advantageous for situations which evolve dynamically.
IoT and Lightbend based Intelligent Platform for Fire Monitoring System Yun Gao	2020	IoT and Lightbend	Mainly focus on development process of fire in high-rise buildings under complex conditions, the heat transfer principle of fire spread in highrise buildings under complex conditions, and the spread characteristics of fire smoke in high-rise buildings under complex conditions
A Multiagent Multisensor Based Security System for Intelligent Building Ren C. Luo', Shin Yao. Lin', Kuo L. Su"	2003	Adaptive Data fusion	There are four methods (adaptive fusion method, rule-based method, redundancy management method and static method) to be applied in event detection and sensor fault diagnosis. Then we implement these methods using computer simulation, and achieve nice results
Application of an Intelligent Algorithm in Estimating the Fire Site Dazhi E, Ming Zhang	2017	Estimation the fire site, on basis of gravitation model and elastic force	It is indicated that the fire site calculated by intelligent algorithm can be close to actual one through fire scene reconstruction and simulation to the certain fire cases in nearly ten years
Automatic Fire Alarm and Fire Control Linkage System in Intelligent Buildings Wang Suli, Liu Ganlai	2010	Fire Control linkage system subsystem	The system has a higher standard and greater scalability, providing a reliable, high-quality fire radio subsystem
Fire detection and Isolation for Intelligent Building Using Adaptive Sensory Fusion Method System Ren C. Luo, Kuo L. Su, and Kuo H. Tsai	2002	Detecting and Isolating sensory failures	The proposed method is a suitable solution for sensor fault detection and isolation
Study on Remote Monitoring System of Fire Fighting Ma Shuling Sun, Shaoguo, Yang Tingwu	2011	Network transmission as a core communication platform	The difficulty of network monitoring management system can be reduced and the application and maintain of the system can be improved

Design of Fire Detection and Alarm System Based on Intelligent Neural Network Mingyi Zhu, Jiamin Zhang	2011	Neural network	Fire detection based on neural network intelligent algorithm detects fire more accurately and reduce the false alarm.
Information Fusion Technology and Its Application to Fire Automatic Control System of Intelligent Building Liting Cao, Jingwen Tian and Wei Jiang	2007	Multi-Sensor information fusion	Stron viability, Larger measured space range, High reliability, High space distinguishes
Intelligent Fire Warning System Based on Fuzzy Extension Constraint Algorithm Zhao Peng	2014	Fuzzy Extension Constraint Algoritm	Intelligent fire warning system is proposed and designed based on fuzzy extension constraint algorithm