Tab 3. Searches found after the end of the first stage of the protocol.

N	Databases	Autor	Year	Title
1		(Dharmarajan, et al. 2022)	2022	Diabetes Prediction using Random Forest Classifier with Different Wrapper Methods
2		(Singh, Mukul et al. 2022)	2022	Vehicle telematics: An Internet of Things and Big Data approach
3		(Kumar, N et al. 2021)	2021	METHWORK: An Approach for Ranking of Research Trends with a Case Study for IoET
4		(Luengo, J. et al. 2020)	2020	Big data preprocessing
5		(Li, H. et al. 2022)	2022	Spatial data quality in the Internet of Things: Management, exploitation, and prospects
6		(Sadler, L. et al. 2016)	2016	A distributed value of information (VoI)-based approach for mission-adaptive context-aware information management and presentation
7		(Jun, W. et al. 2022)	2022	Hyperspectral band selection via region-aware latent features fusion based clustering,Information Fusion
8	Google Scholar	(Roy, S. et al. 2022)	2022	A lightweight supervised intrusion detection mechanism for IoT networks,Future Generation Computer Systems
9		(Liu, Jiaxin, et al. 2021)	2021	Research on Online Status Evaluation Technology for Main Equipment of Power Transmission and Transformation Based on Digital Twin
10		(Kolisetty, S. et al. 2022)	2022	A study on predictive maintenance using edge intelligence
11		(Miraftabzadeh, S. et al. 2017)	2017	Real-time adaptive data-driven perception for anomaly priority scoring at scale
12		(Bashynska, I. et al. 2018)	2018	The overview-analytical document of the international experience of building smart city,Verslas: Teorija Ir Praktika/Business: Theory And Practice
13		(EX, L et al. 2019)	2019	Notiva
14		(Zhang, X et al. 2019)	2019	The Proceedings of the 2018 Asia-Pacific International Symposium on Aerospace Technology (APISAT 2018)
15		(Zheng, Dehua et al. 2020)	2020	An improved LDA-based ELM classification for intrusion detection algorithm in IoT application
16		(Sutikno, T., et al. 2022)	2022	Insights on the internet of things: past , present, and future directions
17		(Senapati, D., et al. 2022)	2022	An intelligent spatial stream processing framework for digital forensics amid the COVID-19 outbreak
18		(Latip, R., et al. 2022)	2022	Attribute reduction based scheduling algorithm with enhanced hybrid genetic algorithm and particle swarm optimization for optimal device selection
19		(Seo, J., et al. 2022)	2022	Effect of Compressed Sensing Rates and Video Resolutions on a PoseNet Model in an AIoT System
20		(Kim, M., et al. 2022)	2022	Efficient Personalized Speech Enhancement Through Self-Supervised Learning
21		(Al-Khamees, H.A.A., et al. 2022)	2022	An Evolving Fuzzy Model to Determine an Optimal Number of Data Stream Clusters
22		(Xu, L., et al. 2022)	2022	Research on the Rapid Diagnostic Method of Rolling Bearing Fault Based on Cloud–Edge Collaboration
23		(Pi, D., et al. 2022)	2022	HNIO: A Hybrid Nature-Inspired Optimization Algorithm for Energy Minimization in UAV-Assisted Mobile Edge Computing
24		(Väänänen, O., et al. 2022)	2022	Efficiency of temporal sensor data compression methods to reduce LoRa-based sensor node energy consumption
25		(Ding, W., et al. 2022)	2022	Communication-Efficient Federated Learning with Adaptive Quantization
26		(Abdullah, N.F., et al. 2022)	2022	Energy-Efficient beyond 5G Multiple Access Technique with Simultaneous Wireless Information and Power Transfer for the Factory of the Future
27		(Wang, B., et al. 2022)	2022	EP-ADTA: Edge Prediction-Based Adaptive Data Transfer Algorithm for Underwater Wireless Sensor Networks (UWSNs)
28		(Pioli, L., et al. 2022)	2022	An overview of data reduction solutions at the edge of IoT systems: a systematic mapping of the literature
29		(Kurup, S., et al. 2022)	2022	Hybrid multi criteria decision methods for optimal cloud selection in mobile cloud computing
30		(Yong, B.X., et al. 2022)	2022	Coalitional Bayesian autoencoders: Towards explainable unsupervised deep learning with applications to condition monitoring under covariate shift
31		(Liu, L., et al. 2022)	2022	Multiobjective Evolutionary Multitasking With Two-Stage Adaptive Knowledge Transfer Based on Population Distribution
32		(Li, H; et al. 2022)	2022	Spatial Data Quality in the IoT Era: Management and Exploitation
33		(Kadhim, A.N., et al. 2022)	2022	Design an efficient internet of things data compression for healthcare applications
34		(Costa, F.S., et al. 2022)	2022	FOCUSeR: A Fog Online Context-Aware Up-to-Date Sensor Ranking Method
35		(Sujatha, D., et al. 2022)	2022	A new design of multimedia big data retrieval enabled by deep feature learning and Adaptive Semantic Similarity Function
36		(Wahab, A., et al. 2022)	2022	Cloud Computing as a Platform for Monetizing Data Services: A Two-Sided Game Business Model
37		(Sahil, et al. 2022)	2022	Fog-assisted Energy Efficient Cyber Physical System for Panic-based Evacuation during Disasters
38		(Shen, Z., et al. 2022)	2022	A Survey of Blockchain Data Management Systems
39		(Polachan, K., et al. 2022)	2022	TCPSbed: A Modular Testbed for Tactile Internet-Based Cyber-Physical Systems
40		(Molinié, D., et al. 2022)	2022	Clustering at the Disposal of Industry 4.0: Automatic Extraction of Plant Behaviors
41	Scopus	(Huang, K., et al. 2022)	2022	An 8-Bit in Resistive Memory Computing Core With Regulated Passive Neuron and Bitline Weight Mapping
42		(Martín, C., et al. 2022)	2022	Facilitating the monitoring and management of structural health in civil infrastructures with an Edge/Fog/Cloud architecture
43		(Shrisha, H.S., et al. 2022)	2022	An energy efficient and scalable endpoint linked green content caching for Named Data Network based Internet of Things
44		(Morshed, B.I., et al. 2022)	2022	A pilot study towards a smart-health framework to collect and analyze biomarkers with low-cost and flexible wearables
45		(Salman, O., et al. 2022)	2022	Robotics cyber security: vulnerabilities attacks countermeasures and recommendations
46		(Song, W., et al. 2022)	2022	Hybrid Data Selection With Context and Content Features for Visual Crowdsensing
47		(Han, Y., et al. 2022)	2022	Internet of Vehicles Information Processing Method with Vehicle-Mounted Cloud Grid as the Underlying Data Fusion Structure
48		(Hisano, D., et al. 2022)	2022	Edge Computing-Assisted DNN Image Recognition System With Progressive Image Retransmission
49		(Borova, M., et al. 2022)	2022	A Performance Analysis of Edge Computing Compression Methods for Environmental Monitoring Nodes with LoRaWAN Communications
50		(Morario, A; et al. 2022)	2022	Engine vibration anomaly detection in vessel engine room
51		(Haider, A., et al. 2022)	2022	QoS Provisioning: Key Drivers and Enablers Toward the Tactile Internet in Beyond 5G Era
52		(Golec, M., et al. 2022)	2022	AIBLOCK: Blockchain based Lightweight Framework for Serverless Computing using AI
53		(Krishnan, S., et al. 2022)	2022	Secure and Scalable Healthcare Data Transmission in IoT Based on Optimized Routing Protocols for Mobile Computing Applications
54		(Xiong, W., et al. 2022)	2022	Initial Clustering Based on the Swarm Intelligence Algorithm for Computing a Data Density Parameter
55		(Marosi, A.C., et al. 2022)	2022	Toward Reference Architectures: A Cloud-Agnostic Data Analytics Platform Empowering Autonomous Systems
56		(Yao, D., et al. 2022)	2022	Blockchain and K-Means Algorithm for Edge AI Computing
57		(Chin, J.F., et al. 2022)	2022	Surveying the Sense of Urgency of the Tactical-Level Management to Adopt Industry 4.0 Technologies: Ranking of Three Sister Plants Based on BWM-CRITIC-TOPSIS
58		(Alhassan Alolo, A.-R.A., et al. 2022)	2022	Chaotic Salp Swarm Optimization-Based Energy-Aware VMP Technique for Cloud Data Centers
59		(Wang, H., et al. 2022)	2022	Multinode Data Offloading for Urban Wireless Sensor Networks Based on Fog Computing: A Multiarmed Bandit Approach
60		(Fu, Y., et al. 2022)	2022	Data Integrity Audit Based on Data Blinding for Cloud and Fog Environment
61		(Giordano, M., et al. 2022)	2022	Design and Performance Evaluation of an Ultralow-Power Smart IoT Device With Embedded TinyML for Asset Activity Monitoring
62		(Cavicchioli, R; et al. 2022)	2022	A Novel Real-Time Edge-Cloud Big Data Management and Analytics Framework for Smart Cities
63		(Liu, J., et al. 2022)	2022	Space Information Network Resource Scheduling for Cloud Computing: A Deep Reinforcement Learning Approach
64		(Lu, B., et al. 2022)	2022	Nonlinear Traffic Data Reconstruction in Large-Scale Internet of Vehicle Systems: A Neural Network Approach

65	(Li, B., et al. 2022)	2022	Lightweight and High-Performance Data Protection for Edge Network Security
66	(Pal, S., et al. 2022)	2022	Optimized Energy Efficient Strategy for Data Reduction between Edge Devices in Cloud-IoT
67	(Jerusha, D., et al. 2022)	2022	Cryptographic Lightweight Encryption Algorithm with Dimensionality Reduction in Edge Computing
68	(Bukhsh, M., et al. 2022)	2022	An Energy-Efficient Data Aggregation Mechanism for IoT Secured by Blockchain
69	(Alyasseri, A., et al. 2022)	2022	EEG Channel Selection Using Multiobjective Cuckoo Search for Person Identification as Protection System in Healthcare Applications
70	(Kholidy, H.A., et al. 2022)	2022	Multi-layer attack graph analysis in the 5g edge network using a dynamic hexagonal fuzzy method
71	(Albaseer, A., et al. 2022)	2022	Fine-Grained Data Selection for Improved Energy Efficiency of Federated Edge Learning
72	(Huh, E.-N., et al. 2021)	2021	Efficient solution for large-scale iot applications with proactive edge-cloud publish/subscribe brokers clustering
73	(Nwogbaga, N.E., et al. 2021)	2021	Investigation into the effect of data reduction in offloadable task for distributed IoT-fog-cloud computing
74	(Chen, Q., et al. 2021)	2021	Rough fuzzy model based feature discretization in intelligent data preprocess
75	(Anaadumba, R., et al. 2021)	2021	A renewable energy forecasting and control approach to secured edge-level efficiency in a distributed micro-grid
76	(Qin, B., et al. 2021)	2021	Research on Design of Fog Computing Optimization Model for Medical Big Data
77	(Hafeez, T; et al. 2021)	2021	Using Dynamic Perceptually Important Points for Data Reduction in IoT
78	(Moussa, S., et al. 2021)	2021	The spatiotemporal data fusion (Stdf) approach: Iot-based data fusion using big data analytics
79	(Taïk, A;, et al. 2021)	2021	Data-quality based scheduling for federated edge learning
80	(Khan, S.Z., et al. 2021)	2021	An NB-IoT-based edge-of-things framework for energy-efficient image transfer
81	(Boukhobza, J., et al. 2021)	2021	IoT Data Replication and Consistency Management in Fog Computing
82	(Sen, T, et al. 2021)	2021	Context-aware Data Operation Strategies in Edge Systems for High Application Performance
83	(Devic, G et al. 2021)	2021	Highly-Adaptive Mixed-Precision MAC Unit for Smart and Low-Power Edge Computing
84	(Nasif, A., et al. 2021)	2021	The deep learning solutions on lossless compression methods for alleviating data load on iot nodes in smart cities
85	(Jiao, W., et al. 2021)	2021	A joint energy replenishment and data collection strategy in heterogeneous wireless rechargeable sensor networks
86	(Ibrahim, M., et al. 2021)	2021	All-in-one: Toward hybrid data collection and energy saving mechanism in sensing-based IoT applications
87	(Calabrese, F., et al. 2021)	2021	Predictive maintenance: a novel framework for a data-driven semi-supervised and partially online prognostic health management application in industries
88	(Wang, X., et al. 2021)	2021	Directional correlation coefficient measures for Pythagorean fuzzy sets: their applications to medical diagnosis and cluster analysis
89	(Burrello, A., et al. 2021)	2021	Embedded Streaming Principal Components Analysis for Network Load Reduction in Structural Health Monitoring
90	(Kasrin, N., et al. 2021)	2021	Data-sharing markets for integrating IoT data processing functionalities
91	(Seeling, P., et al. 2021)	2021	Real-time compression for tactile internet data streams
92	(Lara-Benítez, P., et al. 2021)	2021	An Experimental Review on Deep Learning Architectures for Time Series Forecasting
93	(Grolinger, K., et al. 2021)	2021	Edge-Cloud Computing for Internet of Things Data Analytics: Embedding Intelligence in the Edge with Deep Learning
94	(Erhan, L., et al. 2021)	2021	Smart anomaly detection in sensor systems: A multi-perspective review
95	(Wu, Y., et al. 2021)	2021	Convergence of Blockchain and Edge Computing for Secure and Scalable IIoT Critical Infrastructures in Industry 4.0
96	(Chen, T., et al. 2021)	2021	TLSmell: Direct identification on malicious HTTPs encryption traffic with simple connection-specific indicators
97	(Atoui, I, et al. 2021)	2021	A Multivariate Data Reduction Approach for Wireless Sensor Networks
98	(Liu, Z, et al. 2021)	2021	Bridging Data Center AI Systems with Edge Computing for Actionable Information Retrieval
99	(Wang, Y., et al. 2021)	2021	An Efficient and Secure Malicious User Detection Scheme Based on Reputation Mechanism for Mobile Crowdsensing VANET
100	(Samukawa, S., et al. 2021)	2021	Management of Phonon Transport in Lateral Direction for Gap-Controlled Si Nanopillar/SiGe Interlayer Composite Materials
101	(Martin, D., et al. 2021)	2021	A Weighted Chimp Optimization Algorithm
102	(Koyazo, J.T., et al. 2021)	2021	Collaborative systems for telemedicine diagnosis accuracy
103	(Hu, S., et al. 2021)	2021	Resource Scheduling in Edge Computing: A Survey
104	(Liu, R., et al. 2021)	2021	A Practical Integrated Multi-Criteria Decision-Making Scheme for Choosing Cloud Services in Cloud Systems
105	(Garcia, L, et al. 2021)	2021	Multi-layer fog computing framework for constrained LoRa networks intended for water quality monitoring and precision agriculture systems
106	(Dube, S., et al. 2021)	2021	Dynamic sampling of images from various categories for classification based incremental deep learning in fog computing
107	(Yoshino, H., et al. 2021)	2021	Traffic reduction technologies and data aggregation control to minimize latency in IoT systems
108	(Frikha, T., et al. 2021)	2021	A Disaster Management Framework Using Internet of Things-Based Interconnected Devices
109	(Ninos, A., et al. 2021)	2021	Synthetic Radar Dataset Generator for Macro-Gesture Recognition
110	(Buckhorst, A.F., et al. 2021)	2021	Holarchy for line-less mobile assembly systems operation in the context of the internet of production
111	(Babar, M., et al. 2021)	2021	Intelligent Computation Offloading for IoT Applications in Scalable Edge Computing Using Artificial Bee Colony Optimization
112	(Wang, Y., et al. 2021)	2021	Research on the Key Issues of Big Data Quality Management Evaluation and Testing for Automotive Application Scenarios
113	(Ma, Z., et al. 2021)	2021	Joint optimization of computation offloading data compression energy harvesting and application scenarios in fog computing
114	(Wu, J., et al. 2021)	2021	Efficient Edge Cache Collaboration Transmission Strategy of Opportunistic Social Network in Trusted Community
115	(Hafeez, T., et al. 2021)	2021	Edge intelligence for data handling and predictive maintenance in IIoT
116	(Zhu, R., et al. 2021)	2021	Edge Sensing-Enabled Multistage Hierarchical Clustering Deredundancy Algorithm in WSNs
117	(Promwongsa, N., et al. 2021)	2021	A Comprehensive Survey of the Tactile Internet: State-of-the-Art and Research Directions
118	(Dube, S., et al. 2021)	2021	A Novel Approach of IoT Stream Sampling and Model Update on the IoT Edge Device for Class Incremental Learning in an Edge-Cloud System
119	(Tan, Y., et al. 2021)	2021	An Efficient Data Aggregation Scheme Based on Differentiated Threshold Configuring Joint Optimal Relay Selection in WSNs
120	(Xu, P., et al. 2021)	2021	Automatic Selection and Parameter Configuration of Big Data Software Core Components Based on Retention Pattern
121	(Lin, J., et al. 2021)	2021	Double Integral-Based Method for Ranking Intuitionistic Multiplicative Sets and Its Application in Selecting Logistics Transfer Station
122	(Lu, S., et al. 2021)	2021	Efficient Data Reduction at the Edge of Industrial Internet of Things for PMSM Bearing Fault Diagnosis
123	(Thomas, D., et al. 2021)	2021	QoS-Aware Energy Management and Node Scheduling Schemes for Sensor Network-Based Surveillance Applications
124	(Płaczek, B., et al. 2021)	2021	Classifier-based data transmission reduction in wearable sensor network for human activity monitoring
125	(Wu, T., et al. 2021)	2021	A feature-based intelligent deduplication compression system with extreme resemblance detection
126	(Yazdani, N, et al. 2020)	2020	Memory-aware Online Compression of CAN Bus Data for Future Vehicular Systems
127	(Attaoui, A.E., et al. 2020)	2020	Machine learning-based edge-computing on a multi-level architecture of WSN and IoT for real-time fall detection
128	(Zhang, Y., et al. 2020)	2020	M-BiRank: co-ranking developers and projects using multiple developer-project interactions in open source software community
129	(Himeur, Y., et al. 2020)	2020	Data fusion strategies for energy efficiency in buildings: Overview challenges and novel orientations
130	(Seo, Y.-S., et al. 2020)	2020	Improving bug report triage performance using artificial intelligence based document generation model
131	(Wang, J., et al. 2020)	2020	Parameterized algorithms of fundamental NP-hard problems: a survey
132	(Yu, X.-Y., et al. 2020)	2020	Data anomaly detection and Data fusion based on Incremental Principal Component Analysis in Fog Computing
133	(You, I., et al. 2020)	2020	Data-intensive task scheduling for heterogeneous big data analytics in IoT system

134	(Zhao, Z., et al. 2020)	2020	Time-critical data management in clouds: Challenges and a Dynamic Real-Time Infrastructure Planner (DRIP) solution
135	(Chung, J.-W., et al. 2020)	2020	ShadowTutor: Distributed Partial Distillation for Mobile Video DNN Inference
136	(Yazdani, N, et al. 2020)	2020	Hermes: Enabling energy-efficient IoT networks with generalized deduplication
137	(Tsipis, A., et al. 2020)	2020	An alertness-adjustable cloud/fog IoT solution for timely environmental monitoring based on wildfire risk forecasting
138	(Zhu, L., et al. 2020)	2020	Mapping ontology vertices to a line using hypergraph framework
139	(Imrith, N, et al. 2020)	2020	Dynamic Orchestration of Security Services at Fog Nodes for 5G IoT
140	(Majeed, A, et al. 2020)	2020	Modelling Fog Offloading Performance
141	(Burrello, A, et al. 2020)	2020	Enhancing structural health monitoring with vehicle identification and tracking
142	(Pasolini, G., et al. 2020)	2020	Crowd-based cognitive perception of the physical world: Towards the internet of senses
143	(Dechouniotis, D., et al. 2020)	2020	Edge computing resource allocation for dynamic networks: The DRUID-NET vision and perspective
144	(Cooke, R.A., et al. 2020)	2020	A model for distributed in-network and near-edge computing with heterogeneous hardware
145	(Kolomvatsos, K., et al. 2020)	2020	A probabilistic model for assigning queries at the edge
146	(Choi, J., et al. 2020)	2020	Codr: Correlation-based data reduction scheme for efficient gathering of heterogeneous driving data
147	(Tsipis, A., et al. 2020)	2020	Latency-Adjustable Cloud/Fog Computing Architecture for Time-Sensitive Environmental Monitoring in Olive Groves
148	(Amaxilatis, D., et al. 2020)	2020	A smartwater metering deployment based on the fog computing paradigm
149	(Swamy, S; et al. 2020)	2020	An empirical study on system level aspects of Internet of Things (IoT)
150	(Al-Akhras, M., et al. 2020)	2020	Rule-Based Approach to Detect IoT Malicious Files
151	(Kolomvatsos, K., et al. 2020)	2020	An Ensemble Interpretable Machine Learning Scheme for Securing Data Quality at the Edge
152	(Le-Trung, Q., et al. 2020)	2020	User-Driven Adaptive Sampling for Massive Internet of Things
153	(Cao, Y., et al. 2020)	2020	Hybrid deep learning model assisted data compression and classification for efficient data delivery in mobile health applications
154	(Bae, S.-H., et al. 2020)	2020	Design of Smart Home Implementation within IoT Natural Language Interface
155	(Jiang, X.S., et al. 2020)	2020	A Time Convolutional Network Based Outlier Detection for Multidimensional Time Series in Cyber-Physical-Social Systems
156	(Sharma, S.K., et al. 2020)	2020	Toward Tactile Internet in beyond 5G Era: Recent Advances Current Issues and Future Directions
157	(Huang, J., et al. 2020)	2020	Edge Computing-Based Adaptable Trajectory Transmission Policy for Vessels Monitoring Systems of Marine Fishery
158	(Tolba, A., et al. 2020)	2020	EMS: An Energy Management Scheme for Green IoT Environments
159	(Zuo, W., et al. 2020)	2020	Detection of sensitive data to counter global terrorism
160	(Li, G., et al. 2020)	2020	Drift Calibration Using Constrained Extreme Learning Machine and Kalman Filter in Clustered Wireless Sensor Networks
161	(Sun, H., et al. 2020)	2020	MVideo: Edge Computing Based Mobile Video Processing Systems
162	(Varghese, B., et al. 2019)	2019	Performance estimation of container-based cloud-to-fog offloading
163	(Yazdan, N, et al. 2019)	2019	Protocols to reduce CPS sensor traffic using smart indexing and edge computing support
164	(Li, C., et al. 2019)	2019	Intelligent sensor-cloud in fog computer: A novel hierarchical data job scheduling strategy
165	(Wang, Y., et al. 2019)	2019	DeepChunk: Deep Q-Learning for Chunk-Based Caching in Wireless Data Processing Networks
166	(Xie, M., et al. 2019)	2019	A low redundancy data collection scheme to maximize lifetime using matrix completion technique
167	(Labib, N.S., et al. 2019)	2019	Internet of unmanned aerial vehicles—a multilayer low-altitude airspace model for distributed UAV traffic management
168	(Kapassa, E, et al. 2019)	2019	An Innovative eHealth System Powered by 5G Network Slicing
169	(ur Rehman, M.H., et al. 2019)	2019	The role of big data analytics in industrial Internet of Things
170	(Plastiras, G, et al. 2019)	2019	EdgeNet - Balancing accuracy and performance for edge-based convolutional neural network object detectors
171	(Chen, X., et al. 2019)	2019	A Time-Driven Data Placement Strategy for a Scientific Workflow Combining Edge Computing and Cloud Computing
172	(Jan, M.A., et al. 2019)	2019	SmartEdge: An end-to-end encryption framework for an edge-enabled smart city application
173	(Chen, M., et al. 2019)	2019	Data Correlation-Aware Resource Management in Wireless Virtual Reality (VR): An Echo State Transfer Learning Approach
174	(Jin, Q., et al. 2019)	2019	A secure IoT service architecture with an efficient balance dynamics based on cloud and edge computing
175	(Ghosh, A, et al. 2019)	2019	Deep Learning: Edge-Cloud Data Analytics for IoT
176	(Gibert Renart, E., et al. 2019)	2019	Distributed operator placement for IoT data analytics across edge and cloud resources
177	(Kar, S., et al. 2019)	2019	A scientific decision framework for cloud vendor prioritization under probabilistic linguistic term set context with unknown/partialweight information
178	(Burrelio, A; et al. 2019)	2019	Embedding Principal Component Analysis for Data Reduction in Structural Health Monitoring on Low-Cost IoT Gateways
179	(Lin, Y; et al. 2019)	2019	ADD: Application and Data-Driven Controller Design
180	(Tortonesi, M., et al. 2019)	2019	Taming the IoT data deluge: An innovative information-centric service model for fog computing applications
181	(Xing, X., et al. 2019)	2019	CMTN-SP: A novel coverage-control algorithm for moving-target nodes based on sensing probability model in sensor networks
182	(Poonam, K.K., et al. 2019)	2019	A Step towards the Efficiency of Collisions in the Wireless Sensor Networks
183	(Deng, W., et al. 2019)	2019	Fault diagnosis method based on principal component analysis and broad learning system
184	(Adeli, H; et al. 2019)	2019	Neural networks and statistical learning second edition
185	(Ekbatanifard, G., et al. 2019)	2019	Digital Forensics Architecture for Evidence Collection and Provenance Preservation in IaaS Cloud Environment Using SDN and Blockchain Technology
186	(Kang, D., et al. 2019)	2019	Sustainable assessment for selecting the best alternative of reclaimed water use under hesitant fuzzy multi-criteria decision making
187	(Okafor, N.U., et al. 2019)	2019	Considerations for system design in IoT-based autonomous ecological sensing
188	(Queiroz, J; et al. 2019)	2019	Distributing intelligence among cloud fog and edge in industrial cyber-physical systems
189	(Jing, W., et al. 2019)	2019	Data Loss and Reconstruction of Location Differential Privacy Protection Based on Edge Computing
190	(Brandão, R, et al. 2019)	2019	A data traffic reduction approach towards centralized mining in the IoT context
191	(Scolati, R, et al. 2019)	2019	A containerized big data streaming architecture for edge cloud computing on clustered single-board devices
192	(Xie, M., et al. 2019)	2019	Reducing Delay and Maximizing Lifetime for Wireless Sensor Networks with Dynamic Traffic Patterns
193	(Xing, X., et al. 2019)	2019	Mobile Intelligent Computing in Internet of Things: An Optimized Data Gathering Method Based on Compressive Sensing
194	(Xie, M., et al. 2019)	2019	An efficient information maximization based adaptive congestion control scheme in wireless sensor network
195	(Wang, T., et al. 2019)	2019	An optimized clustering communication protocol based on intelligent computing in information-centric internet of things
196	(Abdel-Basset, M., et al. 2019)	2019	Internet of Spatial Things: A New Reference Model with Insight Analysis
197	(Wan, S., et al. 2019)	2019	Attribute Reduction Based on Genetic Algorithm for the Coevolution of Meteorological Data in the Industrial Internet of Things
198	(Wang, T., et al. 2019)	2019	A survey on the progress of testing techniques and methods for wireless sensor networks
199	(Widodo, R; et al. 2021)	2021	Hadoop Data Reduction Framework: Applying Data Reduction at the DFS Layer
200	(Young, D.; et al. 2020)	2020	The SOXS Data-Reduction Pipeline
201	(Zhou, S; et al. 2022)	2022	Sparse SVM for Sufficient Data Reduction
202	(Scarciotti, G; et al. 2020)	2020	Data-driven constrained optimal model reduction
203	(Chen, Z; et al. 2021)	2021	Secure and verifiable outsourced data dimension reduction on dynamic data
204	Web of Science	(Taddei, T; et al. 2020)	2020	A REGISTRATION METHOD FOR MODEL ORDER REDUCTION: DATA COMPRESSION AND GEOMETRY REDUCTION
205		(Kanno, Y et al. 2020)	2020	Dimensionality reduction enhances data-driven reliability-based design optimizer
206		(Parthalain, N; et al. 2020)	2020	Fuzzy-Rough Set Bireducts for Data Reduction
207		(Monshizadeh, N; et al. 2020)	2020	Amidst Data-Driven Model Reduction and Control
208		(Reddy, G; et al. 2020)	2020	Analysis of Dimensionality Reduction Techniques on Big Data
209		(Jain, M; et al. 2021)	2021	MultiMAP: dimensionality reduction and integration of multimodal data
210		(Liang, X; et al. 2022)	2022	MGARD plus : Optimizing Multilevel Methods for Error-Bounded Scientific Data Reduction

211	(Moghimi, M; et al. 2020)	2020	Information Loss Due to the Data Reduction of Sample Data from Discrete Distributions
212	(Jain, K; et al. 2022)	2022	A Combinational Data Prediction Model for Data Transmission Reduction in Wireless Sensor Networks
213	(Alam, M.; et al. 2020)	2020	Error-Aware Data Clustering for In-Network Data Reduction in Wireless Sensor Networks
214	(Tao, R; et al. 2020)	2020	Boosting Computational Effectiveness in Big Spatial Flow Data Analysis with Intelligent Data Reduction
215	(Ge, X; et al. 2020)	2020	High-Dimensional Hybrid Data Reduction for Effective Bug Triage
216	(Mehta, K; et al. 2022)	2022	A codesign framework for online data analysis and reduction
217	(Wlodarczyk-Sielicka, M; et al. 2020)	2020	Processing of Bathymetric Data: The Fusion of New Reduction Methods for Spatial Big Data
218	(Basgall, M; et al. 2021)	2021	FDR2-BD: A Fast Data Reduction Recommendation Tool for Tabular Big Data Classification Problems
219	(Raia, M; et al. 2021)	2021	Artificial Neural Network and Data Dimensionality Reduction Based on Machine Learning Methods for PMSM Model Order Reduction
220	(Mertzios, G.; et al. 2020)	2020	The Power of Linear-Time Data Reduction for Maximum Matching
221	(Mayalu, A; et al. 2020)	2020	Lidar Data Reduction for Unmanned Systems Navigation in Urban Canyon
222	(You, S.; et al. 2021)	2021	Comparative Study of Dimensionality Reduction Techniques for Spectral-Temporal Data
223	(Dzemyda, G; et al. 2022)	2022	Geometric MDS Performance for Large Data Dimensionality Reduction and Visualization
224	(Peng, Xa; et al. 2020)	2020	Maximum Discriminant Difference Criterion for Dimensionality Reduction of Tensor Data
225	(Waggoner, P.; et al. 2021)	2021	Applying dimension reduction in modern data science and quantitative analysis
226	(Kim, Y; et al. 2021)	2021	Deep learning-based statistical noise reduction for multidimensional spectral data
227	(Martin, B; et al. 2020)	2020	Robust dimensionality reduction for data visualization with deep neural networks
228	(Yuanxia, Z; et al. 2022)	2022	Information Entropy-Based Attribute Reduction for Incomplete Set-Valued Data
229	(Marjan, H; et al. 2021)	2021	Data reduction for serial crystallography using a robust peak finder
230	(Reza, M; et al. 2020)	2020	Internet of things devices: digital forensic process and data reduction
231	(Usyukov, V; et al. 2020)	2020	Multi-attribute reduction of GPS data trajectories: a new approach
232	(Kavitha, V. R.; et al. 2022)	2022	Optimization Based Vector Quantization for Data Reduction in Multimedia Applications
233	(Katcho, A.; et al. 2021)	2021	Int3D: A Data Reduction Software for Single Crystal Neutron Diffraction
234	(Susmi, S; et al. 2022)	2022	Optimized LSTM with Dimensionality Reduction Based Gene Expression Data Classification
235	(Fujiwara, T; et al. 2020)	2020	An Incremental Dimensionality Reduction Method for Visualizing Streaming Multidimensional Data
236	(Kwon, H; et al. 2022)	2022	Data Traffic Reduction with Compressed Sensing in an AIoT System
237	(Li, C; et al. 2020)	2020	A greyness reduction framework for prediction of grey heterogeneous data
238	(Tripathy, J; et al. 2022)	2022	Combination of Reduction Detection Using TOPSIS for Gene Expression Data Analysis
239	(Ragavan, N.; et al. 2022)	2022	A Novel Big Data Storage Reduction Model for Drill Down Search
240	(Heusinger, M; et al. 2022)	2022	Dimensionality reduction in the context of dynamic social media data streams
241	(Sikansi, F; et al. 2020)	2020	Similarity-Driven Edge Bundling: Data-Oriented Clutter Reduction in Graphs Layouts
242	(Alotaibi, Z.; et al. 2022)	2022	Sky Imager Data Reduction Using Autoencoder and Internet of Things Computing
243	(Raska, P; et al. 2021)	2021	Data Reduction of Digital Twin Simulation Experiments Using Different Optimisation Methods
244	(Kouril, S; et al. 2020)	2020	CROP: correlation-based reduction of feature multiplicities in untargeted metabolomic data
245	(Cenedese, M.; et al. 2022)	2022	Data-driven nonlinear model reduction to spectral submanifolds in mechanical systems
246	(Marion, R; et al. 2020)	2020	AdaCLV for interpretable variable clustering and dimensionality reduction of spectroscopic data
247	(Maia, H; et al. 2020)	2020	MineReduce: An approach based on data mining for problem size reduction
248	(Xu, A; et al. 2020)	2020	Bias reduction in the two-stage method for degradation data analysis
249	(Souza, R; et al. 2020)	2020	Data reduction in scientific workflows using provenance monitoring and user steering
250	(Ghani, M; et al. 2020)	2020	Fast Enhanced CT Metal Artifact Reduction Using Data Domain Deep Learning
251	(Salim, C; et al. 2021)	2021	K-predictions based data reduction approach in WSN for smart agriculture
252	(Rupiper, A.; et al. 2021)	2021	Assessing Data Adequacy for Determining Utility-Specific Water Loss Reduction Standards
253	(Chen, W; et al. 2020)	2020	Hybrid Dimensionality Reduction Forest With Pruning for High-Dimensional Data Classification
254	(Maisto, M; et al. 2022)	2022	Non-Uniform Warping Sampling for Data Reduction in Planar Array Diagnostics
255	(Chu, J; et al. 2020)	2020	Bias reduction in the population size estimation of large data sets
256	(Kawano, Y; et al. 2020)	2020	Data-Driven Model Reduction of Monotone Systems by Nonlinear DC Gains
257	(Das, H; et al. 2022)	2022	Biomedical data analysis using neuro-fuzzy model with post-feature reduction
258	(Liu, H; et al. 2020)	2020	Noise Reduction Power Stealing Detection Model Based on Self-Balanced Data Set
259	(Das, S; et al. 2022)	2022	Nonlinear Dimensionality Reduction for Data Visualization: An Unsupervised Fuzzy Rule-Based Approach
260	(Chu, S; et al. 2022)	2022	Comprehensive evaluation of noise reduction methods for single-cell RNA sequencing data
261	(Amouzgar, M; et al. 2022)	2022	Supervised dimensionality reduction for exploration of single-cell data by HSS-LDA
262	(Lin, K.; et al. 2021)	2021	Data-driven model reduction, Wiener projections, and the Koopman-Mori-Zwanzig formalism
263	(Pierquin, A; et al. 2021)	2021	Nonlinear Data-Driven Model Order Reduction Applied to Circuit-Field Magnetic Problem
264	(Rubio, P.; et al. 2020)	2020	Bayesian data assimilation with Transport Map sampling and PGD model order reduction
265	(Amblard, E; et al. 2022)	2022	Hubness reduction improves clustering and trajectory inference in single-cell transcriptomic data
266	(Bevern, R; et al. 2020)	2020	On approximate data reduction for the Rural Postman Problem: Theory and experiments
267	(Niemann, J; et al. 2021)	2021	Data-driven model reduction of agent-based systems using the Koopman generator
268	(Yu, B; et al. 2020)	2020	The data dimensionality reduction and bad data detection in the process of smart grid reconstruction through machine learning
269	(Roccetti, M; et al. 2021)	2021	An alternative approach to dimension reduction for pareto distributed data: a case study
270	(Fujiwara, T; et al. 2021)	2021	A Visual Analytics Framework for Reviewing Multivariate Time-Series Data with Dimensionality Reduction
271	(Arowolo, M.; et al. 2020)	2020	A Hybrid Heuristic Dimensionality Reduction Methods for Classifying Malaria Vector Gene Expression Data
272	(Shirmard, H; et al. 2020)	2020	Integration of Selective Dimensionality Reduction Techniques for Mineral Exploration Using ASTER Satellite Data
273	(Hajderanj, L; et al. 2020)	2020	Single- and Multi-Distribution Dimensionality Reduction Approaches for a Better Data Structure Capturing
274	(Lanari, P.; et al. 2020)	2020	New horizons in quantitative compositional mapping - Analytical conditions and data reduction using XMAPTOOLS
275	(Wu, Z; et al. 2022)	2022	A Distributed Attribute Reduction Algorithm for High-Dimensional Data under the Spark Framework
276	(Gao, C; et al. 2021)	2021	Granular-conditional-entropy-based attribute reduction for partially labeled data with proxy labels
277	(Klus, S; et al. 2020)	2020	Data-driven approximation of the Koopman generator: Model reduction, system identification, and control
278	(Valero-Mas, J.; et al. 2020)	2020	Data Reduction in the String Space for Efficient kNN Classification Through Space Partitioning
279	(Lee, H; et al. 2022)	2022	A Digital Filter Bank Based Method for Data Reduction in Spaceborne SAR Electronics
280	(Capelli, R; et al. 2021)	2021	A Data-Driven Dimensionality Reduction Approach to Compare and Classify Lipid Force Fields
281	(Mukherjee, D; et al. 2022)	2022	Optimized Energy Efficient Strategy for Data Reduction Between Edge Devices in Cloud-IoT
282	(Yoshino, H; et al. 2021)	2021	Traffic Reduction Technologies and Data Aggregation Control to Minimize Latency in IoT Systems
283	(Morera, H; et al. 2022)	2022	Reduction of Video Capsule Endoscopy Reading Times Using Deep Learning with Small Data
284	(Sahar, G; et al. 2021)	2021	Data Redundancy Reduction for Energy-Efficiency in Wireless Sensor Networks: A Comprehensive Review
285	(Zhang, Y; et al. 2022)	2022	Novel Data-Driven Spatial-Spectral Correlated Scheme for Dimensionality Reduction of Hyperspectral Images
286	(Stefanoiu, D; et al. 2020)	2020	Joint Stochastic Spline and Autoregressive Identification Aiming Order Reduction Based on Noisy Sensor Data
287	(Kopp, W; et al. 2022)	2022	Simultaneous dimensionality reduction and integration for single-cell ATAC-seq data using deep learning
288	(Foster, I; et al. 2021)	2021	Online data analysis and reduction: An important Co-design motif for extreme-scale computers
289	(Boer, J.; et al. 2020)	2020	Polarimetric imaging mode of VLT/SPHERE/IRDIS I. Description, data reduction, and observing strategy
290	(Yang, L; et al. 2021)	2021	The CIPCA-BPNN Failure Prediction Method Based on Interval Data Compression and Dimension Reduction
291	(Czech, C; et al. 2022)	2022	Data-driven models for crashworthiness optimisation: intrusive and non-intrusive model order reduction techniques

292	(Xiao, C; et al. 2020)	2020	Toward More Efficient WMSN Data Search Combined FJLT Dimension Expansion With PCA Dimension Reduction
293	(Boniecki, P; et al. 2021)	2021	Neural Reduction of Image Data in Order to Determine the Quality of Malting Barley
294	(Berdeu, A; et al. 2020)	2020	PIC: a data reduction algorithm for integral field spectrographs: Application to the SPHERE instrument
295	(Yang, Q.; et al. 2020)	2020	Rapid data-driven model reduction of nonlinear dynamical systems including chemical reaction networks using l(1)-regularization
296	(Abbasinejad, R; et al. 2020)	2020	A Data Size Reduction Approach Applicable in Process Control System of Oil and Gas Plants
297	(Sen, D; et al. 2022)	2022	Associative Classifier Coupled With Unsupervised Feature Reduction for Dengue Fever Classification Using Gene Expression Data
298	(Yang, B; et al. 2022)	2022	A Novel Traffic Flow Reduction Method Based on Incomplete Vehicle History Spatio-Temporal Trajectory Data
299	(Arowolo, M; et al. 2021)	2021	A survey of dimension reduction and classification methods for RNA-Seq data on malaria vector
300	(Datta, A; et al. 2021)	2021	A data reduction and compression description for high throughput time-resolved electron microscopy
301	(Surya, A; et al. 2020)	2020	The Infrared Imaging Spectrograph (IRIS) for TMT: Final Design Development of the Data Reduction System
302	(Hangai, S; et al. 2021)	2021	Haptic Data Prediction and Extrapolation for Communication Traffic Reduction of Four-Channel Bilateral Control System
303	(Zhang, M; et al. 2021)	2021	A novel nonlinear dimension reduction approach to infer population structure for low-coverage sequencing data
304	(Abidi, K; et al. 2020)	2020	Discrete-time adaptive control of uncertain sampled-data systems with uncertain input delay: a reduction
305	(Zhang, H; et al. 2020)	2020	Mobile phone GPS data in urban ride-sharing: An assessment method for emission reduction potential
306	(Glaws, A.; et al. 2020)	2020	Inverse regression for ridge recovery: a data-driven approach for parameter reduction in computer experiments
307	(Schulze, J.; et al. 2022)	2022	Identification of MIMO Wiener-type Koopman models for data-driven model reduction using deep learning
308	(Al-Rayif, M; et al. 2021)	2021	PAPR Reduction Method based on In-phase/Quadrature Data Symbol Components in MIMO-OFDM Systems
309	(Koziel, S; et al. 2020)	2020	Fast Multi-Objective Optimization of Antenna Structures by Means of Data-Driven Surrogates and Dimensionality Reduction
310	(Bolton, S; et al. 2022)	2022	ADS-B classification using multivariate long short-term memory-fully convolutional networks and data reduction techniques
311	(Ajirak, M; et al. 2021)	2021	Bayesian Nonparametric Dimensionality Reduction of Categorical Data for Predicting Severity of COVID-19 in Pregnant Women
312	(Rafique, O; et al. 2020)	2020	Weighted dimensionality reduction and robust Gaussian mixture model based cancer patient subtyping from gene expression data
313	(Jie, J; et al. 2021)	2021	High dimensional feature data reduction of multichannel sEMG for gesture recognition based on double phases PSO
314	(Hoyer, S.; et al. 2020)	2020	Expected performances of the Characterising Exoplanet Satellite (CHEOPS) III. Data reduction pipeline: architecture and simulated performances
315	(Adolfo, C; et al. 2021)	2021	Sample Reduction for Physiological Data Analysis Using Principal Component Analysis in Artificial Neural Network
316	(Nwogbaga, E; et al. 2021)	2021	Investigation into the effect of data reduction in offloadable task for distributed IoT-fog-cloud computing
317	(Castellanos, F.; et al. 2021)	2021	Prototype generation in the string space via approximate median for data reduction in nearest neighbor classification
318	(Mi, K; et al. 2022)	2022	Producer Services Agglomeration and Carbon Emission Reduction-An Empirical Test Based on Panel Data from China
319	(Wang, X; et al. 2021)	2021	Efficient Data Reduction at the Edge of Industrial Internet of Things for PMSM Bearing Fault Diagnosis
320	(Yang, T; et al. 2020)	2020	A Manifold-Based Dimension Reduction Algorithm Framework for Noisy Data Using Graph Sampling and Spectral Graph
321	(Kofler, A; et al. 2020)	2020	Spatio-Temporal Deep Learning-Based Undersampling Artefact Reduction for 2D Radial Cine MRI With Limited Training Data
322	(Khosla, K; et al. 2020)	2020	Local-Topology-Based Scaling for Distance Preserving Dimension Reduction Method to Improve Classification of Biomedical Data-Sets
323	(Zhao, S; et al. 2023)	2023	AE-TPGG: a novel autoencoder-based approach for single-cell RNA-seq data imputation and dimensionality reduction
324	(Shi, W; et al. 2021)	2021	New algorithms for trace-ratio problem with application to high-dimension and large-sample data dimensionality reduction
325	(Niewiadomski, A; et al. 2021)	2021	TYPE-2 FUZZY LOGIC SYSTEMS IN APPLICATIONS: MANAGING DATA IN SELECTIVE CATALYTIC REDUCTION FOR AIR POLLUTION PREVENTION
326	(Heller, W.; et al. 2022)	2022	drtsans: The data reduction toolkit for small-angle neutron scattering at Oak Ridge National Laboratory
327	(Spirko-Burns, L; et al. 2021)	2021	Supervised Dimension Reduction for Large-Scale Omics Data With Censored Survival Outcomes Under Possible Non-Proportional Hazards
328	(Pioli, L; et al. 2022)	2022	An overview of data reduction solutions at the edge of IoT systems: a systematic mapping of the literature
329	(Alapati, Y; et al. 2021)	2021	An Efficient Signal Processing Model for Malicious Signal Identification and Energy Consumption Reduction for Improving Data Transmission Rate
330	(Tonacci, A; et al. 2020)	2020	Can Machine Learning Predict Stress Reduction Based on Wearable Sensors' Data Following Relaxation at Workplace? A Pilot Study
331	(Santana, A.; et al. 2021)	2021	A dimension reduction technique applied to regression on high dimension, low sample size neurophysiological data sets
332	(Valls, J.; et al. 2021)	2021	Supervised data transformation and dimensionality reduction with a 3-layer multi-layer perceptron for classification problems
333	(Li, Jiling; et al. 2022)	2022	The Media Public Opinion Analysis on the Implementation of Double Reduction Policy in Education Based on Big Data
334	(Zhao, H; et al. 2021)	2021	E-Government, Corruption Reduction and the Role of Culture: A Study Based on Panel Data of 57 Countries
335	(Guo, J; et al. 2020)	2020	Feature Dimension Reduction Using Stacked Sparse Auto-Encoders for Crop Classification with Multi-Temporal, Quad-Pol SAR Data
336	(Martinek, R; et al. 2022)	2022	Hybrid In-Vehicle Background Noise Reduction for Robust Speech Recognition: The Possibilities of Next Generation 5G Data Networks
337	(Giannopoulos, A; et al. 2020)	2020	Data-driven order reduction and velocity field reconstruction using neural networks: The case of a turbulent boundary layer
338	(Wang, Y; et al. 2022)	2022	Dimensionality Reduction and Extraction of Engineering Remote Sensing Data Based on Building Information Modeling and Geographical Information System
339	(Wiharto; et al. 2021)	2021	Modification of a Density-Based Spatial Clustering Algorithm for Applications with Noise for Data Reduction in Intrusion Detection Systems
340	(Biswas, A; et al. 2021)	2021	Feature Analysis, Tracking, and Data Reduction: An Application to Multiphase Reactor Simulation MFiX-Exa for In-Situ Use Case
341	(Pasha, S; et al. 2020)	2020	Novel Feature Reduction (NFR) Model With Machine Learning and Data Mining Algorithms for Effective Disease Risk Prediction
342	(Chong, T; et al. 2022)	2022	Semantic Depth Data Transmission Reduction Techniques Based on Interpolated 3D Plane Reconstruction for Light-Weighted LiDAR Signal Processing Platform
343	(Plante, A; et al. 2021)	2021	Dimensional reduction based on peak fitting of Raman micro spectroscopy data improves detection of prostate cancer in tissue specimens
344	(Hamood, F; et al. 2022)	2022	SIMSI-Transfer: Software-Assisted Reduction of Missing Values in Phosphoproteomic and Proteomic Isobaric Labeling Data Using Tandem Mass Spectrum Clustering

345	(Agostinis, F; et al. 2022)	2022	NewWave: a scalable R/Bioconductor package for the dimensionality reduction and batch effect removal of single-cell RNA-seq data
346	(Ismail, A; et al. 2020)	2020	A New Data-Driven Approach for Power IGBT Remaining Useful Life Estimation Based On Feature Reduction Technique and Neural Network
347	(Jiang, J; et al. 2021)	2021	Evolutionary Optimisation for Reduction of the Low-Frequency Discrete-Spectrum Force of Marine Propeller Based on a Data-Driven Surrogate Model
348	(Khaled, A; et al. 2020)	2020	A comparative study on dimensionality reduction of dielectric spectral data for the classification of basal stem rot (BSR) disease in oil palm
349	(Dhibi, K; et al. 2021)	2021	A Hybrid Fault Detection and Diagnosis of Grid-Tied PV Systems: Enhanced Random Forest Classifier Using Data Reduction and Interval-Valued Representation
350	(Fancher, C.; et al. 2021)	2021	pyRS: a user-friendly package for the reduction and analysis of neutron diffraction data measured at the High Intensity Diffractometer for Residual Stress Analysis
351	(Mariusz, Z; et al. 2020)	2020	Reduction of Circular Arcs in European Cadastral Systems-The Proposal of a Solution Referring to the Recommendations of the INSPIRE Data Specification on Cadastral Parcels
352	(Seo, H; et al. 2022)	2022	Multi-Sensor-Based Blind-Spot Reduction Technology and a Data-Logging Method Using a Gesture Recognition Algorithm Based on Micro E-Mobility in an IoT Environment
353	(Naoki, M; et al. 2020)	2020	Dynamic gating window technique for the reduction of dosimetric error in respiratory-gated spot-scanning particle therapy: An initial phantom study using patient tumor trajectory data
354	(Xiaohang, F; et al. 2022)	2022	Manifold reduction techniques for the comparison of crank angle-resolved particle image velocimetry (PIV) data and Reynolds-averaged Navier-Stokes (RANS) simulations in a spark ignition direct injection (SIDI) engine