

Rate-Splitting Multiple Access: Fundamentals, Survey, and

IEEE Communications Surveys and Tutorials

24, 2073-2126

DOI: [10.1109/comst.2022.3191937](https://doi.org/10.1109/comst.2022.3191937)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Coordinated Beamforming Design for Multi-User Multi-Cell MIMO VLC Networks. IEEE Photonics Journal, 2022, 14, 1-10.	1.0	2
2	Full Duplex Cooperative Rate Splitting Multiple Access for a MISO Broadcast Channel With Two Users. IEEE Communications Letters, 2022, 26, 1913-1917.	2.5	9
3	Weighted Sum-Rate Maximization for Rate-Splitting Multiple Access Based Secure Communication. , 2022, , .		10
4	Robust and Adaptive Power Allocation Techniques for Rate Splitting Based MU-MIMO Systems. IEEE Transactions on Communications, 2022, 70, 4656-4670.	4.9	6
5	Completion Time Minimization of Fog-RAN-Assisted Federated Learning With Rate-Splitting Transmission. IEEE Transactions on Vehicular Technology, 2022, 71, 10209-10214.	3.9	5
6	Rate-Splitting Multiple Access for 6G—Part III: Interplay With Reconfigurable Intelligent Surfaces. IEEE Communications Letters, 2022, 26, 2242-2246.	2.5	24
7	Rate-Splitting Multiple Access for 6G—Part II: Interplay With Integrated Sensing and Communications. IEEE Communications Letters, 2022, 26, 2237-2241.	2.5	10
8	Zero SIC Based Rate Splitting Multiple Access Technique. IEEE Communications Letters, 2022, 26, 2430-2434.	2.5	3
9	Rate-Splitting Multiple Access for 6G—Part I: Principles, Applications and Future Works. IEEE Communications Letters, 2022, 26, 2232-2236.	2.5	21
10	Rate Splitting Multiple Access Aided Mobile Edge Computing in Cognitive Radio Networks. , 2022, , .		5
11	Delay-constrained quality maximization in RSMA-based video streaming networks. , 2022, , .		0
12	Rate-Splitting Multiple Access for RIS-Aided Cell-Edge Users With Discrete Phase-Shifts. IEEE Communications Letters, 2022, 26, 2581-2585.	2.5	10
13	Rate-Splitting Multiple Access With STAR RIS Over Spatially-Correlated Channels. IEEE Transactions on Communications, 2022, 70, 6410-6424.	4.9	16
14	Analytical Modeling of RSMA-enabled User-Centric RRH Clustering in C-RAN over Generalized Fading Channels. IEEE Wireless Communications Letters, 2022, , 1-1.	3.2	0
15	Max-Min Fairness Precoder Design for Rate-Splitting Multiple Access: Impact of Imperfect Channel Knowledge. IEEE Transactions on Vehicular Technology, 2023, 72, 1355-1359.	3.9	5
16	On the Ergodic Rate of Cognitive Radio Inspired Uplink Multiple Access. IEEE Communications Letters, 2023, 27, 95-99.	2.5	6
17	Rate-Splitting Multiple Access-Enabled Security Analysis in Cognitive Satellite Terrestrial Networks. IEEE Transactions on Vehicular Technology, 2022, 71, 11756-11771.	3.9	11
18	An Optimization Framework for General Rate Splitting for General Multicast. IEEE Transactions on Wireless Communications, 2023, 22, 1573-1587.	6.1	0

#	ARTICLE	IF	CITATIONS
19	Globally Optimal Spectrum- and Energy-Efficient Beamforming for Rate Splitting Multiple Access. IEEE Transactions on Signal Processing, 2022, 70, 5025-5040.	3.2	12
20	Low Altitude Satellite Constellation for Futuristic Aerial-Ground Communications. CMES - Computer Modeling in Engineering and Sciences, 2023, 136, 1053-1089.	0.8	1
21	A Full Dive Into Realizing the Edge-Enabled Metaverse: Visions, Enabling Technologies, and Challenges. IEEE Communications Surveys and Tutorials, 2023, 25, 656-700.	24.8	116
22	Performance Analysis and Optimization of RSMA Enabled UAV-Aided IBL and FBL Communication With Imperfect SIC and CSI. IEEE Transactions on Wireless Communications, 2023, 22, 3714-3732.	6.1	8
23	Dual-Polarized Massive MIMO-RSMA Networks: Tackling Imperfect SIC. IEEE Transactions on Wireless Communications, 2023, 22, 3194-3215.	6.1	5
24	Mitigating Intra-Cell Pilot Contamination in Massive MIMO: A Rate Splitting Approach. IEEE Transactions on Wireless Communications, 2023, 22, 3472-3487.	6.1	10
25	Reconfigurable Intelligent Surfaces Empowered Cooperative Rate Splitting with User Relaying. , 2022, , .		2
26	Batch Gradient Descent-based Optimization of WMMSE for Rate Splitting Strategy. , 2022, , .		0
27	Deep Learning-Based Rate-Splitting Multiple Access for Massive MIMO-OFDM Systems With Imperfect CSIT. , 2022, , .		1
28	Energy-efficient Federated Edge Learning for Internet of Vehicles via Rate-Splitting Multiple Access. , 2022, , .		1
29	Rate Splitting in MIMO RIS-Assisted Systems With Hardware Impairments and Improper Signaling. IEEE Transactions on Vehicular Technology, 2023, 72, 4580-4597.	3.9	6
30	Max-Min Fairness of Rate-Splitting Multiple Access With Finite Blocklength Communications. IEEE Transactions on Vehicular Technology, 2023, 72, 6816-6821.	3.9	6
31	Resource Allocation in MU-MISO Rate-Splitting Multiple Access With SIC Errors for URLLC Services. IEEE Transactions on Communications, 2023, 71, 229-243.	4.9	8
32	Secure Rate Splitting Multiple Access: How Much of the Split Signal to Reveal?. IEEE Transactions on Wireless Communications, 2023, 22, 4173-4187.	6.1	8
33	Rate-Splitting Multiple Access for Short-Packet Uplink Communications: A Finite Blocklength Analysis. IEEE Communications Letters, 2023, 27, 517-521.	2.5	3
34	Trajectory Design in multi-UAV-assisted RSMA Downlink Communication. , 2022, , .		7
35	Outage Analysis of Millimeter Wave RSMA Systems. IEEE Transactions on Communications, 2023, 71, 1504-1520.	4.9	3
36	Outage Performance Analysis of RSMA-Aided Semi-Grant-Free Transmission Systems. IEEE Open Journal of the Communications Society, 2023, 4, 253-268.	4.4	4

#	ARTICLE	IF	CITATIONS
37	Revealing the Benefits of Rate-Splitting Multiple Access for Uplink IoT Traffic. , 2022, , .		2
38	Robust Sum-GDoF of Symmetric 2×2 Weak Interference Channel With Heterogeneous Hops. IEEE Journal on Selected Areas in Communications, 2023, 41, 1309-1319.	9.7	1
39	Efficient Rate-Splitting Multiple Access for the Internet of Vehicles: Federated Edge Learning and Latency Minimization. IEEE Journal on Selected Areas in Communications, 2023, 41, 1468-1483.	9.7	3
40	Deep Learning-Based Rate-Splitting Multiple Access for Reconfigurable Intelligent Surface-Aided Tera-Hertz Massive MIMO. IEEE Journal on Selected Areas in Communications, 2023, 41, 1431-1451.	9.7	7
41	Rate-Splitting Multiple Access Aided Mobile Edge Computing With Randomly Deployed Users. IEEE Journal on Selected Areas in Communications, 2023, 41, 1549-1565.	9.7	5
42	Rate-Splitting and Common Message Decoding in Hybrid Cloud/Mobile Edge Computing Networks. IEEE Journal on Selected Areas in Communications, 2023, 41, 1566-1583.	9.7	1
43	When Virtual Reality Meets Rate Splitting Multiple Access: A Joint Communication and Computation Approach. IEEE Journal on Selected Areas in Communications, 2023, 41, 1536-1548.	9.7	3
44	Energy Efficient Semantic Communication Over Wireless Networks With Rate Splitting. IEEE Journal on Selected Areas in Communications, 2023, 41, 1484-1495.	9.7	8
45	Active RIS Assisted Rate-Splitting Multiple Access Network: Spectral and Energy Efficiency Tradeoff. IEEE Journal on Selected Areas in Communications, 2023, 41, 1452-1467.	9.7	17
46	Improved Spectral Efficiency and Connectivity in RSMA based 5G V2X Systems. EAI Endorsed Transactions on Energy Web, 2023, 9, e3.	0.3	0
47	Toward Greener 5G and Beyond Radio Access Networks—A Survey. IEEE Open Journal of the Communications Society, 2023, 4, 768-797.	4.4	6
48	Tanner-Graph-Based Massive Multiple Access—Transmission and Decoding Schemes. IEEE Transactions on Wireless Communications, 2023, 22, 8468-8482.	6.1	0
49	Group-Connected Impedance Network of RIS-Assisted Rate-Splitting Multiple Access in MU-MIMO Wireless Communication Systems. Sensors, 2023, 23, 3934.	2.1	0
50	Deep Learning-Based Signal Detection for Rate-Splitting Multiple Access Under Generalized Gaussian Noise. IEEE Open Journal of Vehicular Technology, 2023, 4, 257-270.	3.4	0
51	RSMA for Hybrid RIS-UAV-Aided Full-Duplex Communications With Finite Blocklength Codes Under Imperfect SIC. IEEE Transactions on Wireless Communications, 2023, 22, 5957-5975.	6.1	6
52	Rate-Splitting Multiple Access-Based Satellite—Vehicular Communication System: A Noncooperative Game Theoretical Approach. IEEE Open Journal of the Communications Society, 2023, 4, 430-441.	4.4	1
53	Link Adaptation for Rate Splitting Systems With Partial CSIT. IEEE Journal on Selected Areas in Communications, 2023, 41, 1336-1350.	9.7	0
54	Evolutionary Games for Dynamic Network Resource Selection in RSMA-Enabled 6G Networks. IEEE Journal on Selected Areas in Communications, 2023, 41, 1320-1335.	9.7	3

#	ARTICLE	IF	CITATIONS
55	A Primer on Rate-Splitting Multiple Access: Tutorial, Myths, and Frequently Asked Questions. IEEE Journal on Selected Areas in Communications, 2023, 41, 1265-1308.	9.7	26
56	Successive Cancellation Integer Forcing via Practical Binary Codes. IEEE Transactions on Wireless Communications, 2023, 22, 6383-6396.	6.1	0
57	Deep Learning for Signal Detection in Uplink and Downlink Rate-Splitting Multiple Access Systems. , 2022, , .		0
58	Cooperative User Relaying with RSMA for 6G Networks: Overview, Research Challenges and Future Trends. , 2023, , .		0
59	Content-Aware Transmission in UAV-Assisted Multicast Communication. IEEE Transactions on Wireless Communications, 2023, 22, 7144-7157.	6.1	2
60	Large-Scale Rate-Splitting Multiple Access in Uplink UAV Networks: Effective Secrecy Throughput Maximization Under Limited Feedback Channel. IEEE Transactions on Vehicular Technology, 2023, 72, 9267-9280.	3.9	1
61	NOMA-Based VLC Systems: A Comprehensive Review. Sensors, 2023, 23, 2960.	2.1	18
62	Rate-Splitting Multiple Access for Quantized Multiuser MIMO Communications. IEEE Transactions on Wireless Communications, 2023, 22, 7696-7711.	6.1	3
63	On sum-rate maximization in downlink UAV-aided RSMA systems. ICT Express, 2024, 10, 15-21.	3.3	3
64	Location Privacy-Aware and Energy-Efficient Offloading for Distributed Edge Computing. IEEE Transactions on Wireless Communications, 2023, 22, 7975-7988.	6.1	0
65	A Two-Tier Deep Neural Network Detector for Two-User Rate-Splitting Multiple Access Systems. , 2023, , .		0
66	A Review on Unmanned Aerial Vehicle-based Networks and Satellite-based Networks with RSMA: Research Challenges and Future Trends. , 2023, , .		0
67	Power Distribution Adjustment for Rate-Splitting Performance Improvement in MIMO Systems. , 2023, , .		0
68	ADMM-Induced Low-Complexity Precoder Design Algorithm for Rate-Splitting Multiple Access. , 2022, , .		0
69	Study of Coded ALOHA with Multi-User Detection under Heavy-Tailed and Correlated Arrivals. Future Internet, 2023, 15, 132.	2.4	0
70	Model-Based Deep Learning Receiver Design for Rate-Splitting Multiple Access. IEEE Transactions on Wireless Communications, 2023, 22, 8352-8365.	6.1	1
71	Rate Splitting Multiple Access for Next Generation Cognitive Radio Enabled LEO Satellite Networks. IEEE Transactions on Wireless Communications, 2023, 22, 8423-8435.	6.1	9
75	Active IRS Design for RSMA-based Downlink URLLC Transmission. , 2023, , .		0

#	ARTICLE	IF	CITATIONS
76	Reconfigurable Intelligent Surface Empowered Rate-Splitting Multiple Access for Simultaneous Wireless Information and Power Transfer. , 2023, , .		0
92	Rate Splitting and Precoding Strategies for Multi-User MIMO Broadcast Channels with Common and Private Streams. , 2023, , .		2
93	Joint Transmit and Receive Beamforming Design for Uplink RSMA Enabled Integrated Sensing and Communication Systems. , 2023, , .		0
101	Information Recycling Assisted Collaborative Edge Computing for Distributed Learning. , 2023, , .		0
103	Sum-Rate Maximization for Active RIS-Aided Downlink RSMA System. , 2023, , .		1
106	A Rate-Splitting-Based Approach for Sum-Rate Optimization Scheme in UAV-Assisted Emergency Communication. , 2023, , .		0
118	RSMA for Future Generation Multiple Access: Challenges and Opportunities. , 2023, , .		0
126	Deep Reinforcement Learning-Based Sum-Rate Maximization for Uplink Multi-user SIMO-RSMA Systems. Lecture Notes on Data Engineering and Communications Technologies, 2023, , 36-45.	0.5	0
127	Satellite User Grouping and Multi-Beam Patterning for Generalized Rate-Splitting Multiple Access. , 2023, , .		0
128	RISAC: Rate-splitting Multiple Access Enabled Integrated Sensing and Communication Systems. , 2023, , .		0
129	Joint Transmit Precoding and Rate Allocation for Rate-Splitting Multiple Access Based Wireless Backhaul HetNets. , 2023, , .		1
130	A Unified Resource Allocation Framework for Virtual Reality Streaming over Wireless Networks. , 2023, , .		0
131	Online Learning-Based Beamforming for Rate-Splitting Multiple Access: A Constrained Bandit Approach. , 2023, , .		0
133	Rate-Splitting Enabled Multi-Connectivity in Mixed-Criticality Systems. , 2023, , .		1
134	Cooperative Rate Splitting Multiple Access in Cognitive Radio Networks: Power Allocation and Location Optimization. , 2023, , .		0
135	Constellation Based Symbol Error Rate and Power Constraint Analysis for RSMA. , 2023, , .		0
136	IRS-Assisted Rate-Splitting Multiple Access for Overloaded Multiuser MISO Transmission. , 2023, , .		0
141	Energy-Efficient Rate Splitting for MIMO STAR-RIS-Assisted Broadcast Channels with I/Q Imbalance. , 2023, , .		1

#	ARTICLE	IF	CITATIONS
142	RSMA-Enabled Multigroup Multicast Rate-Matching for Multibeam Satellite Systems. , 2023, , .		0
143	Data-Driven Deep Learning-Based Rate-Splitting Multiple Access for FDD Massive MIMO-OFDM Systems with Implicit CSI. , 2023, , .		0
144	Multi-Functional RIS for Sum-Rate Maximization in Rate-Splitting Multiple Access Networks. , 2023, , .		0
147	Simultaneously Transmitting and Reflecting Reconfigurable Intelligent Surface Aided RSMA Communications: Outage Probability Analysis. , 2023, , .		0
148	STAR-RIS Empowered Full Duplex Cooperative Rate Splitting. , 2023, , .		0
151	Enhancing Secrecy in UAV RSMA Networks: Deep Unfolding Meets Deep Reinforcement Learning. , 2023, , .		0
155	Performance Analysis for RSMA-Empowered STAR-RIS-Aided Downlink Communications. , 2023, , .		0
156	Cooperative Rate-Splitting for Enhanced THz Frequency Coverage. , 2023, , .		0
157	Towards Improved Spectral Efficiency Using RSMA-Integrated Full-Duplex Communications. , 2023, , .		0
158	Defeating Jamming Attacks in Downlink Pairwise NOMA Using Relaying. , 2023, , .		0
159	Age of Information Minimization for Short-Packet Communications RSMA in Satellite-based IoT. , 2023, , .		0
160	Optimized Transmission Strategy for UAV-RIS 2.0 Assisted Communications Using Rate Splitting Multiple Access. , 2023, , .		0
161	Rate-Splitting and Sum-DoF for the K-User MISO Broadcast Channel with Mixed CSIT and Order-($K \hat{+} 1$) Messages. , 2023, , .		0
162	Performance Analysis of RSMA-Based Multi-User MISO System. , 2023, , .		0
163	Rate-Splitting Multiple Access for Control and Command of Multi-UAV Communication with Finite Blocklength. , 2023, , .		0
167	Power Allocation for Rate-Splitting MISO Systems With Imperfect CSIT: A Genetic Approach. , 2023, , .		0