

# Hajime Urai

## List of Publications by Year in descending order

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33  
papers

102  
citations

1684188

5  
h-index

1720034

7  
g-index

33  
all docs

33  
docs citations

33  
times ranked

31  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of Axial Magnetic Fields on Electrical Characteristics of Low-Pressure Wire Discharge. Japanese Journal of Applied Physics, 1994, 33, 4243-4246.	1.5	9
2	Development of partial discharge detection and diagnostic methods of vacuum circuit breaker. , 2014, , .		8
3	Measurement of gas temperature in self-blast chamber of model gas circuit breaker at high current interruption. IEEJ Transactions on Electrical and Electronic Engineering, 2018, 13, 1440-1445.	1.4	7
4	Critical Electric-Field Strength of High-Temperature SF <sub>6</sub> Mixture Gas with Ablated PTFE/BN Vapor at Temperatures of 300~4000 K. , 2019, , .		7
5	Predominant reaction products and dielectric breakdown properties of gas mixtures consisting of SF <sub>6</sub> and ablation products of C <sub>2</sub> F <sub>4</sub> /BN in the temperature range of 300~3000K. Journal Physics D: Applied Physics, 2021, 54, 165204.	2.8	7
6	Evaluation of Thermal Interruption Capability in SF <sub>6</sub> Gas Circuit Breakers with Re-ignition Voltage and its Application to Experimental Design. IEEJ Transactions on Power and Energy, 2012, 132, 407-414.	0.2	7
7	Method of Evaluating Exhaust Characteristics of High-Voltage Circuit Breaker. IEEE Transactions on Power Delivery, 2020, 35, 707-714.	4.3	6
8	High-repetition-rate operation of the wire ion plasma source using a novel method. Review of Scientific Instruments, 1997, 68, 3346-3350.	1.3	5
9	Electrical characteristics of a low pressure wire discharge and an application to high current density electron gun. Radiation Physics and Chemistry, 1995, 46, 499-502.	2.8	4
10	Construction of measurement system of PD phenomena in medium vacuum region of vacuum interrupter. , 2014, , .		4
11	Development of diagnostic methods for vacuum leakage from vacuum interrupter by partial discharge detection. , 2016, , .		4
12	Interrupter Size Effect of High-Voltage Gas Circuit Breaker on Thermal Interruption Performance and Current Zero Properties. IEEJ Transactions on Electrical and Electronic Engineering, 2021, 16, 215-225.	1.4	4
13	Measurement of hot gas exhaust characteristics in SF <sub>6</sub> circuit breaker with small model interrupter. , 2013, , .		3
14	Evaluation of Dielectric Interruption Performance in Gas Circuit Breaker with Ablated PTFE/BN Vapor. , 2019, , .		3
15	Optical Emission Spectroscopy in Self-Blast Gas Circuit Breaker at Large Current Condition. IEEE Transactions on Plasma Science, 2019, 47, 5064-5069.	1.3	3
16	Investigation on Pressure Build-Up and Blowing Processes by Multipoint Pressure Measurement and Fluid Analysis for Self-Blast-Type High-Voltage Circuit Breaker. IEEE Transactions on Plasma Science, 2021, 49, 854-861.	1.3	3
17	Method of Evaluating Dielectric Interruption Capability of High-Voltage Circuit Breaker. IEEE Transactions on Power Delivery, 2022, 37, 3885-3892.	4.3	3
18	Development of Highly Accurate Analysis Method for Compressible Fluid Considering Radiation and Ablation. IEEJ Transactions on Power and Energy, 2007, 127, 1002-1008.	0.2	2

#	ARTICLE	IF	CITATIONS
19	Estimation of interruption performance in high-voltage circuit breakers with a modified method for arc parameter evaluation. , 2011, , .		2
20	Design of Dual Motion Mechanism Moving along Optimized Stroke Curve to Improve Capacitive Current Switching Performance for Gas Circuit Breaker. , 2019, , .		2
21	Analytical Consideration of Electron Avalanche in High-temperature SF <sub>6</sub> Gas with Two Regions of Different Temperature and Pressure. IEEJ Transactions on Power and Energy, 2021, 141, 718-724.	0.2	2
22	Arc and Fluid Dynamics Simulation for High-Voltage Circuit Breakers as a Design Tool. IEEJ Transactions on Power and Energy, 2021, 141, 666-675.	0.2	2
23	Modeling of Dynamic Characteristics for Spring Operating Gas Circuit Breaker. Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C, 2013, 79, 691-703.	0.2	1
24	Ring-Shaped Capacitive Probes for Determination of Spatial Arc Voltage Distribution in High-Voltage Circuit Breaker Model. IEEE Transactions on Plasma Science, 2017, 45, 3300-3305.	1.3	1
25	Performance Prediction Method Considering Shock Wave in Nozzle for High-Voltage Circuit Breaker. Plasma Physics and Technology, 2019, 6, 184-187.	0.3	1
26	Investigation of Ablation Gas Transportation with Optical Emission Spectroscopy for Gas Circuit Breaker. , 2019, , .		1
27	Analytical Study on Electron Avalanche in Two Different Temperature and Pressure Regions for High-temperature SF <sub>6</sub> Gas. , 2022, , .		1
28	Evaluation of Gas Flow by Multi-point Pressure Measurement using a Self-blast Gas Circuit Breaker Model. , 2019, , .		0
29	Trends in Switching and Protection Technology for Stable Supply of Electricity. IEEJ Transactions on Power and Energy, 2013, 133, 794-798.	0.2	0
30	Optimization of Dual Motion Mechanism with Double Grooved Cams for High-voltage Gas Circuit Breaker. Advances in Science, Technology and Engineering Systems, 2020, 5, 109-118.	0.5	0
31	Discharge Propagation in Localized High-temperature SF <sub>6</sub> Gas with Breakdown Voltage Measurement. , 2022, , .		0
32	Temperature Measurement of SF <sub>6</sub> Arcs in Thermal Interruption Region Around Current Zero in Gas Circuit Breakers Using Optical Emission Spectroscopy. , 2022, , .		0
33	Simulations for Current Interruption in High-Voltage Gas Circuit Breakers. IEEJ Transactions on Power and Energy, 2022, 142, 239-242.	0.2	0