

# Tomoyuki Kuroki

## List of Publications by Year in descending order

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102  
papers

1,261  
citations

331670

21  
h-index

434195

31  
g-index

103  
all docs

103  
docs citations

103  
times ranked

636  
citing authors

#	ARTICLE	IF	CITATIONS
1	Total Diesel Emission Control Technology Using Ozone Injection and Plasma Desorption. Plasma Chemistry and Plasma Processing, 2008, 28, 173-187.	2.4	85
2	Toluene concentration using honeycomb nonthermal plasma desorption. Thin Solid Films, 2007, 515, 4272-4277.	1.8	46
3	Regeneration of Honeycomb Zeolite by Nonthermal Plasma Desorption of Toluene. IEEE Transactions on Industry Applications, 2009, 45, 10-15.	4.9	46
4	Carbon particulate matter incineration in diesel engine emissions using indirect nonthermal plasma processing. Thin Solid Films, 2007, 515, 4289-4295.	1.8	45
5	Preparation of PTFE Film With Adhesive Surface Treated by Atmospheric-Pressure Nonthermal Plasma Graft Polymerization. IEEE Transactions on Industry Applications, 2010, 46, 1715-1721.	4.9	40
6	Pilot-Scale Experiment for Simultaneous Dioxin and NO <sub>x</sub> Removal from Garbage Incinerator Emissions Using the Pulse Corona Induced Plasma Chemical Process. Plasma Chemistry and Plasma Processing, 2009, 29, 373-386.	2.4	38
7	NO <sub>x</sub> Aftertreatment Using Thermal Desorption and Nitrogen Nonthermal Plasma Reduction. IEEE Transactions on Industry Applications, 2008, 44, 1403-1409.	4.9	36
8	Decomposition of Adsorbed Xylene on Adsorbents Using Nonthermal Plasma With Gas Circulation. IEEE Transactions on Industry Applications, 2010, 46, 672-679.	4.9	36
9	Pilot-Scale Aftertreatment Using Nonthermal Plasma Reduction of Adsorbed NO <sub>x</sub> in Marine Diesel-Engine Exhaust Gas. Plasma Chemistry and Plasma Processing, 2014, 34, 65-81.	2.4	36
10	Continuous Regeneration of Ceramic Particulate Filter in Stationary Diesel Engine by Nonthermal-Plasma-Induced Ozone Injection. IEEE Transactions on Industry Applications, 2009, 45, 1568-1574.	4.9	34
11	Simultaneous Removal of NO <sub>x</sub> and SO <sub>x</sub> from Flue Gas of a Glass Melting Furnace using a Combined Ozone Injection and Semi-dry Chemical Process. Ozone: Science and Engineering, 2016, 38, 211-218.	2.5	34
12	Diesel emission control system using combined process of nonthermal plasma and exhaust gas components' recirculation. Thin Solid Films, 2009, 518, 987-992.	1.8	32
13	Single-Stage Simultaneous Reduction of Diesel Particulate and NO <sub>x</sub> Using Oxygen-Lean Nonthermal Plasma Application. IEEE Transactions on Industry Applications, 2010, 46, 2143-2150.	4.9	32
14	Surface modification by nonthermal plasma induced by using magnetic-field-assisted gliding arc discharge. Applied Physics Letters, 2012, 101, 041602.	3.3	32
15	Continuous operation of commercial-scale plasma chemical aftertreatment system of smoke tube boiler emission with oxidation reduction potential and pH control. Thin Solid Films, 2008, 516, 6704-6709.	1.8	30
16	Pilot-Scale NO <sub>x</sub> and SO <sub>x</sub> Removal From Boiler Emission Using Indirect-Plasma and Chemical Hybrid Process. IEEE Transactions on Industry Applications, 2010, 46, 29-37.	4.9	27
17	Towards ideal NO <sub>x</sub> control technology for bio-oils and a gas multi-fuel boiler system using a plasma-chemical hybrid process. Applied Energy, 2013, 111, 394-400.	10.1	26
18	Improvement in NO <sub>x</sub> Removal Performance of the Pilot-Scale Boiler Emission Control System Using an Indirect Plasma Chemical Process. IEEE Transactions on Industry Applications, 2010, 46, 1722-1729.	4.9	24

#	ARTICLE	IF	CITATIONS
19	Development of sterilization device using air nonthermal plasma jet induced by atmospheric pressure corona discharge. <i>Thin Solid Films</i> , 2012, 523, 2-5.	1.8	24
20	Water vapor desorption and adsorbent regeneration for air conditioning unit using pulsed corona plasma. <i>Journal of Electrostatics</i> , 2007, 65, 221-227.	1.9	22
21	Pilot-Scale Experiments of Continuous Regeneration of Ceramic Diesel Particulate Filter in Marine Diesel Engine Using Nonthermal Plasma-Induced Radicals. <i>IEEE Transactions on Industry Applications</i> , 2012, 48, 1649-1656.	4.9	22
22	Plating Technology for Fluorocarbon Polymer Films Using Atmospheric-pressure Nonthermal Plasma Graft Polymerization. <i>Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]</i> , 2008, 21, 219-224.	0.3	21
23	Effect of Exhaust Gas Temperature on Oxidation of Marine Diesel Emission Particulates with Nonthermal-Plasma-Induced Ozone. <i>Ozone: Science and Engineering</i> , 2015, 37, 518-526.	2.5	21
24	Diesel Engine Emission Control Using Pulsed Corona Plasma-Wet Chemical Hybrid Process. <i>Journal of Environment and Engineering</i> , 2006, 1, 29-38.	0.2	20
25	Performance Characteristics of Pilot-Scale Indirect Plasma and Chemical System Used for the Removal of $\text{NO}_x$ From Boiler Emission. <i>IEEE Transactions on Industry Applications</i> , 2010, 46, 1707-1714.	4.9	20
26	Continuous reduction of cyclic adsorbed and desorbed NO in diesel emission using nonthermal plasma. <i>Journal of Hazardous Materials</i> , 2016, 308, 216-224.	12.4	20
27	Simultaneous Reduction of Diesel Particulate and NO <sub>x</sub> Using a Catalysis-Combined Nonthermal Plasma Reactor. <i>IEEE Transactions on Industry Applications</i> , 2017, 53, 5875-5882.	4.9	20
28	Improvement of $\text{NO}_x$ Reduction Efficiency in Diesel Emission Control Using Nonthermal Plasma Combined Exhaust Gas Recirculation Process. <i>IEEE Transactions on Industry Applications</i> , 2011, 47, 2359-2366.	4.9	19
29	Molecular-Level Reinforced Adhesion Between Rubber and PTFE Film Treated by Atmospheric Plasma Polymerization. <i>Plasma Chemistry and Plasma Processing</i> , 2016, 36, 1431-1448.	2.4	19
30	Odor Removal Characteristics of a Laminated Film-Electrode Packed-Bed Nonthermal Plasma Reactor. <i>Sensors</i> , 2011, 11, 5529-5542.	3.8	17
31	Decomposition of Trace Phenol in Solution Using Gas-Liquid Interface Discharge. <i>Japanese Journal of Applied Physics</i> , 2006, 45, 4296-4300.	1.5	16
32	PM and $\text{NO}_x$ Removal for Diesel Engine Emission Using Ozonizer and Chemical Hybrid Reactor. <i>IEEE Transactions on Industry Applications</i> , 2008, 44, 1431-1435.	4.9	16
33	Oxidation System of Adsorbed VOCs on Adsorbent Using Nonthermal Plasma Flow. <i>IEEE Transactions on Industry Applications</i> , 2011, 47, 1916-1921.	4.9	16
34	Simultaneous removal of odor and particulate using plasma-treated polymer filters. <i>Thin Solid Films</i> , 2011, 519, 6994-6998.	1.8	16
35	Pilot-Scale Combined Reduction of Accumulated Particulate Matter and NO <sub>x</sub> Using Nonthermal Plasma for Marine Diesel Engine. <i>IEEE Transactions on Industry Applications</i> , 2020, 56, 1804-1814.	4.9	16
36	Microfabrication and Metal Plating Technologies on Polytetrafluoroethylene Film Surface Treated by Atmospheric-Pressure Nonthermal-Plasma Graft Polymerization Process. <i>IEEE Transactions on Industry Applications</i> , 2014, 50, 45-50.	4.9	13

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37	Charge-to-mass ratio and dendrite structure of diesel particulate matter charged by corona discharge. Carbon, 2010, 48, 184-190.	10.3	12
38	Pilot-Scale NO <sub>x</sub> and SO <sub>x</sub> Aftertreatment Using a Two-Phase Ozone and Chemical Injection in Glass-Melting-Furnace Exhaust Gas. IEEE Transactions on Industry Applications, 2019, 55, 6295-6302.	4.9	12
39	Improvement in Molecular-Level Adhesive Strength of PTFE Film Treated by Atmospheric Plasma Combined Processing. IEEE Transactions on Industry Applications, 2019, 55, 825-832.	4.9	12
40	Pilot-Scale NO <sub>x</sub> and SO <sub>x</sub> Aftertreatment by Semi-Dry Plasma-Chemical Hybrid Process in Glass-Melting-Furnace Exhaust Gas. Plasma Chemistry and Plasma Processing, 2022, 42, 51-71.	2.4	12
41	Nanoparticle removal and exhaust gas cleaning using gas-liquid interfacial nonthermal plasma. Journal of Electrostatics, 2017, 87, 86-92.	1.9	10
42	Pilot-Scale Exhaust Gas Treatment for a Glass Manufacturing System Using a Plasma Combined Semi-dry Chemical Process. IEEE Transactions on Industry Applications, 2017, 53, 1416-1423.	4.9	10
43	Development of Low-Emission Bio-Fuel Boiler System With Plasma-Chemical Hybrid $\text{NO}_x$ Reduction. IEEE Transactions on Industry Applications, 2011, 47, 2210-2217.	4.9	9
44	High-Efficiency Carbon Dioxide Reduction Using Nonthermal Plasma Desorption. IEEE Transactions on Industry Applications, 2018, 54, 6422-6429.	4.9	9
45	NO <sub>x</sub> Removal Using Indirect Plasma Oxidation and Chemical Hybrid Process (Comparison of Air Radical) Tj ETQq1 1 0.784314 rgBT /O of Mechanical Engineers Series B B-hen, 2005, 71, 2816-2822.	0.2	8
46	Pilot-scale exhaust gas treatment for a glass manufacturing system using a plasma combined wet chemical process. Mechanical Engineering Journal, 2016, 3, 15-00549-15-00549.	0.4	8
47	Evaluation on nitrogen oxides and nanoparticle removal and nitrogen monoxide generation using a wet-type nonthermal plasma reactor. Journal Physics D: Applied Physics, 2018, 51, 204002.	2.8	8
48	Plasma-Chemical Hybrid NO <sub>x</sub> Removal in Flue Gas from Semiconductor Manufacturing Industries Using a Blade-Dielectric Barrier-Type Plasma Reactor. Energies, 2019, 12, 2717.	3.1	8
49	Numerical Investigation for $\text{CF}_4$ Decomposition Using RF Low-Pressure Plasma. IEEE Transactions on Industry Applications, 2007, 43, 1075-1083.	4.9	7
50	Magnetic-Field-Assisted Gliding Arc Discharge Plasma for Surface Modification. IEEE Transactions on Plasma Science, 2011, 39, 2846-2847.	1.3	7
51	High Reduction Efficiencies of Adsorbed NO <sub>x</sub> in Pilot-Scale Aftertreatment Using Nonthermal Plasma in Marine Diesel-Engine Exhaust Gas. Energies, 2019, 12, 3800.	3.1	7
52	Effect of monomer concentration on adhesive strength of PTFE films treated with atmospheric-pressure nonthermal plasma graft polymerization. Journal of Electrostatics, 2020, 108, 103526.	1.9	7
53	Aftertreatment Technology of NO <sub>x</sub> in Diesel Exhaust Using Concentration by Adsorption and Plasma Reduction (Comparison of Plasma and Thermal Desorptions). 880-02 Nihon Kikai Gakkai Ronbunshu Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2007, 73, 372-379.	0.2	6
54	Application of photo-etching of polytetrafluoroethylene induced by high energy synchrotron radiation to LIGA. Microsystem Technologies, 2013, 19, 301-307.	2.0	6

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55	Adsorbed CO <sub>2</sub> Dissociation Using Argon and Helium Nonthermal Plasma Flows. IEEE Transactions on Industry Applications, 2020, 56, 6983-6989.	4.9	6
56	CF <sub>4</sub> Decomposition Using Low-Pressure Pulse-Modulated Radio Frequency Plasma. JSME International Journal Series B, 2005, 48, 440-447.	0.3	5
57	Direct bonding of PTFE sheets assisted by synchrotron radiation induced surface modification. Microsystem Technologies, 2010, 16, 1495-1500.	2.0	5
58	Ion Cluster Formation by Nonthermal Plasma Induced by Pulse Corona Discharge Toward Indoor Air Cleaning. IEEE Transactions on Industry Applications, 2020, 56, 5480-5488.	4.9	5
59	Continuous Regeneration of Ceramics Particulate Filter in Stationary Diesel Engine Using Nonthermal Plasma-Induced Ozone Injection. , 2008, , .		4
60	Design Factors for $\text{NO}_x$ Reduction in Nitrogen Plasma. IEEE Transactions on Industry Applications, 2010, 46, 2151-2156.	4.9	4
61	CO <sub>2</sub> reduction using adsorption followed by nonthermal plasma treatment. Journal of Physics: Conference Series, 2015, 646, 012056.	0.4	4
62	Nonthermal Plasma Hybrid Process for Preparation of Organic Electroluminescence Fluoropolymer Film Devices. IEEE Transactions on Industry Applications, 2015, 51, 2497-2503.	4.9	4
63	CO <sub>2</sub> Concentration Using Adsorption and Nonthermal Plasma Desorption. IEEE Transactions on Industry Applications, 2017, 53, 2432-2439.	4.9	4
64	NO <sub>x</sub> Aftertreatment System for Diesel Engine Emission Using Thermal Desorption and Plasma Reduction Combined Process. Conference Record - IAS Annual Meeting (IEEE Industry Applications) Tj ETQq0 0 0 rgBT/Overlock 10 Tf 50		
65	Pilot-scale experiment of total marine diesel emission control using ozone injection and nonthermal plasma reduction. , 2013, , .		3
66	Performance of a Wet-Type Nonthermal Plasma Reactor for NO <sub>x</sub> , SO <sub>x</sub> , and Wastewater Treatment. IEEE Transactions on Industry Applications, 2020, 56, 6978-6982.	4.9	3
67	Ultrasonically enhanced electrohydraulic discharge for removal of organic compounds. Journal of Electrostatics, 2020, 108, 103502.	1.9	3
68	Toward NO <sub>x</sub> /SO <sub>x</sub> and Nanoparticle Control Technology Using a Single-Stage Wet-Type Nonthermal Plasma Reactor. IEEE Transactions on Plasma Science, 2021, 49, 1860-1870.	1.3	3
69	Performance Improvement in Semi-dry Ozone Injection NO <sub>x</sub> and SO <sub>x</sub> Removal Process for a Glass Furnace Flue Gas. Ozone: Science and Engineering, 2022, 44, 453-463.	2.5	3
70	Toward Ideal VOCs and Nanoparticle Emission Control Technology Using a Wet-Type Catalysis Nonthermal Plasma Reactor. IEEE Transactions on Industry Applications, 2022, 58, 6591-6598.	4.9	3
71	Simulation of Human Virus Infection Accompanied by Inhalation. 880-02 Nihon Kikai Gakkai Ronbunshu Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2005, 71, 1965-1970.	0.2	2
72	Simultaneous Reduction of Diesel Particulate and NO <sub>x</sub> Using Oxygen-Poor Nonthermal Plasma Application. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2007, , .	0.0	2

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73	Performance of a Wet-type Nonthermal Plasma Reactor for NO <sub>x</sub> , SO <sub>x</sub> , and Wastewater Treatment. , 2019, , .		2
74	Performance evaluation of semi-dry flue gas desulfurization and denitration from flue gas of a glass melt using nonthermal plasma combined process. Mechanical Engineering Journal, 2021, 8, 20-00519-20-00519.	0.4	2
75	Decomposition of CF <sub>4</sub> Exhaust Gas from Semiconductor Manufacturing Equipments Using Low Pressure Inductively Coupled Plasma(Optimization of Operating Conditions and Byproduct Analysis). 880-02 Nihon Kikai Gakkai Ronbunshu Transactions of the Japan Society of Mechanical Engineers Series B B-hen. 2004, 70, 1058-1063.	0.2	1
76	Decomposition of Adsorbed Xylene on Adsorbent Using Nonthermal Plasma and Gas Circulation. , 2008, , .		1
77	Pilot-scale experiments of continuous regeneration of ceramic particulate filter in marine diesel engine using nonthermal plasma-induced radicals. , 2011, , .		1
78	Pilot-scale exhaust gas treatment for a glass manufacturing system using a plasma combined semi-dry chemical process. , 2015, , .		1
79	NO <sub>x</sub> and SO <sub>x</sub> removals for exhaust gas in glass melting furnace using a plasma and dry chemical hybrid process. Transactions of the JSME (in Japanese), 2016, 82, 16-00255-16-00255.	0.2	1
80	Removal of High Concentrations of the Anesthetic Gas Nitrous Oxide Using Nonthermal Plasma Combined With an Adsorbent. IEEE Transactions on Industry Applications, 2017, 53, 5852-5858.	4.9	1
81	High efficient carbon dioxides reduction using nonthermal plasma desorption. , 2017, , .		1
82	Improvement in molecular-level adhesive strength of PTFE film treated by atmospheric plasma combined processing. , 2017, , .		1
83	Oxidative Decomposition of Adsorbed Toluene Using Ozone Concentrated by Nonthermal Plasma Flow. IEEE Transactions on Industry Applications, 2019, 55, 3122-3128.	4.9	1
84	Ion Cluster Formation by Nonthermal Plasma Induced by Pulse Corona Discharge Toward Indoor Air Cleaning. , 2019, , .		1
85	Adsorbed CO <sub>2</sub> Dissociation Using Argon and Helium Nonthermal Plasma Flows. , 2019, , .		1
86	Regeneration Technology of Cutting Oil Using Electrolytic Bubble Flotation Method-Simultaneous Removal of Fine Aluminum Particles and Sludge Contaminant-. IEJ Transactions on Industry Applications, 2006, 126, 330-336.	0.2	1
87	Improvement of Strength Characteristics of Aerospace Fiber Reinforced Composite Materials using Atmospheric Pressure Plasma-Graft Polymerization Treatment. IEJ Transactions on Fundamentals and Materials, 2011, 131, 412-413.	0.2	1
88	Higher Adhesion Strength over 10 N/mm between Rubber and Fluoropolymer Film Treated by Atmospheric Plasma-Graft Polymerization. , 2021, , .		1
89	Dry Emission Control Technology for Glass Melting Furnace by Plasma-Chemical Hybrid Processing. , 2021, , .		1
90	Design Factors for NO <sub>x</sub> Reduction in Nitrogen Plasma. Conference Record - IAS Annual Meeting (IEEE) Tj ETQq0 0 0,rgBT /Overlock 10 TF	0.0	0

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91	Pilot-Plans Experiment for Incinerator Emission Control Using Plasma-Chemical Hybrid Process (Simultaneous Removal of NO <sub>x</sub> and Gas-Phase Dioxins). 880-02 Nihon Kikai Gakkai Ronbunshu Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2007, 73, 1767-1774.	0.2	0
92	NO <sub>x</sub> Aftertreatment System for Diesel Engine Emission Using Thermal Desorption and Plasma Reduction Combined Process. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.0	0
93	Simultaneous Reduction of Diesel Particulate and NO <sub>x</sub> Using Oxygen-Poor Nonthermal Plasma Application. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2007, , .	0.0	0
94	Design Factors for NO <sub>x</sub> Reduction in Nitrogen Plasma. Conference Record - IAS Annual Meeting (IEEE) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.0	0
95	Numerical Simulation of Three-Dimensional Point/Tuft Corona and Electrohydrodynamics. The Proceedings of Conference of Kansai Branch, 2003, 2003.78, _15-17_-_15-18_.	0.0	0
96	227 Numerical Simulation of Three-Dimensional Point Corona and Electrohydrodynamics. The Proceedings of Conference of Kansai Branch, 2004, 2004.79, _2-55_-_2-56_.	0.0	0
97	320 High efficiency NO <sub>x</sub> Reduction in Nitrogen Plasma : flow rate versus concentration. The Proceedings of the Symposium on Environmental Engineering, 2007, 2007.17, 251-252.	0.0	0
98	303 Development of Plasma-Assisted Aftertreatment System for Super Clean Diesel Engine : Recent Status Report. The Proceedings of the Symposium on Environmental Engineering, 2009, 2009.19, 259-260.	0.0	0
99	Plasma-Chemical Hybrid NO <sub>x</sub> Reduction System for Commercial Cogeneration Boiler -Recent Status Report-. IEJ Transactions on Fundamentals and Materials, 2010, 130, 885-891.	0.2	0
100	S055015 Pilot-scale experiment of plasma-hybrid processing aftertreatment system for exhaust gas purification of marine diesel engine. The Proceedings of Mechanical Engineering Congress Japan, 2012, 2012, _S055015-1-_S055015-5.	0.0	0
101	312 Purification technology of diesel particulates in emission from marine diesel engine using plasma-induced radical. The Proceedings of the Symposium on Environmental Engineering, 2013, 2013.23, 210-213.	0.0	0
102	303 NO <sub>x</sub> Reduction for Diesel Engine Using Exhaust Gas Component Recirculation. The Proceedings of the Symposium on Environmental Engineering, 2015, 2015.25, 102-105.	0.0	0