Naoto Tsubouchi

List of Publications by Year
in descending order

100 papers	2,016 citations	257357 24 h-index	276775 41 g-index
100 all docs	100 docs citations	100 times ranked	1680 citing authors

#	Article	IF	Citations
1	Carbon Crystallization during High-Temperature Pyrolysis of Coals and the Enhancement by Calcium. Energy & Fuels, 2003, 17, 1119-1125.	2.5	138
2	Recent progress in Japan on hot gas cleanup of hydrogen chloride, hydrogen sulfide and ammonia in coal-derived fuel gas. Powder Technology, 2009, 190, 340-347.	2.1	99
3	Decomposition of ammonia with iron and calcium catalysts supported on coal chars. Fuel, 2004, 83, 685-692.	3.4	97
4	Novel utilization of mesoporous molecular sieves as supports of cobalt catalysts in Fischerâ€"Tropsch synthesis. Catalysis Today, 2004, 89, 419-429.	2.2	77
5	Catalytic effects of Na and Ca from inexpensive materials on in-situ steam gasification of char from rapid pyrolysis of low rank coal in a drop-tube reactor. Fuel Processing Technology, 2013, 113, 1-7.	3.7	76
6	Nitrogen release during high temperature pyrolysis of coals and catalytic role of calcium in N2 formation. Fuel, 2002, 81, 2335-2342.	3.4	73
7	Nitrogen chemistry in coal pyrolysis: Catalytic roles of metal cations in secondary reactions of volatile nitrogen and char nitrogen. Fuel Processing Technology, 2008, 89, 379-390.	3.7	72
8	Role of nitrogen in pore development in activated carbon prepared by potassium carbonate activation of lignin. Applied Surface Science, 2016, 371, 301-306.	3.1	68
9	Steam gasification of Indonesian subbituminous coal with calcium carbonate as a catalyst raw material. Fuel Processing Technology, 2015, 129, 91-97.	3.7	60
10	Enhancement of N2Formation from the Nitrogen in Carbon and Coal by Calcium. Energy & Fuels, 2001, 15, 158-162.	2.5	58
11	Fischerâ^'Tropsch Synthesis with Cobalt Catalysts Supported on Mesoporous Silica for Efficient Production of Diesel Fuel Fraction. Energy & Fuels, 2003, 17, 804-809.	2.5	55
12	Catalytic decomposition of ammonia gas with metal cations present naturally in low rank coals. Fuel, 2005, 84, 1957-1967.	3.4	55
13	High Catalytic Performance of Fine Particles of Metallic Iron Formed from Limonite in the Decomposition of a Low Concentration of Ammonia. Catalysis Letters, 2005, 105, 203-208.	1.4	48
14	Selective Recovery of Rare Earth Elements from Dy containing NdFeB Magnets by Chlorination. ACS Sustainable Chemistry and Engineering, 2013, 1, 655-662.	3.2	45
15	Evolution of Hydrogen Chloride and Change in the Chlorine Functionality during Pyrolysis of Argonne Premium Coal Samples. Energy & Fuels, 2013, 27, 87-96.	2.5	43
16	Effect of Nitrogen-Containing Compounds on Polychlorinated Dibenzo-p-dioxin/Dibenzofuran Formation through de Novo Synthesis. Environmental Science & Technology, 2005, 39, 795-799.	4.6	42
17	Chemical characterization of dust particles recovered from bag filters of electric arc furnaces for steelmaking: Some factors influencing the formation of hexachlorobenzene. Journal of Hazardous Materials, 2010, 183, 116-124.	6.5	42
18	Formation of Hydrogen Chloride during Temperature-Programmed Pyrolysis of Coals with Different Ranks. Energy & Fuels, 2005, 19, 554-560.	2.5	34

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19	Formation of N2 during pyrolysis of Ca-loaded coals. Fuel, 2002, 81, 1423-1431.	3.4	33
20	Catalytic Performance of Limonite in the Decomposition of Ammonia in the Coexistence of Typical Fuel Gas Components Produced in an Air-Blown Coal Gasification Process. Energy & Fuels, 2007, 21, 3063-3069.	2.5	30
21	Chemical forms of the fluorine and carbon in fly ashes recovered from electrostatic precipitators of pulverized coal-fired plants. Fuel, 2011, 90, 376-383.	3.4	28
22	Influence of Inherent Oxygen Species on the Fluidity of Coal during Carbonization. Energy & Fuels, 2016, 30, 2095-2101.	2.5	27
23	Nitrogen Release from Low Rank Coals during Rapid Pyrolysis with a Drop Tube Reactor. Energy & Fuels, 2003, 17, 940-945.	2.5	26
24	Preparation of Carbon-Containing Iron Ore with Enhanced Crushing Strength from Limonite by Impregnation and Vapor Deposition of Tar Recovered from Coke Oven Gas. Energy & Fuels, 2016, 30, 6233-6239.	2.5	26
25	The fate of sulfur in coal during carbonization and its effect on coal fluidity. International Journal of Coal Geology, 2013, 120, 50-56.	1.9	23
26	Some factors influencing the fluidity of coal blends: Particle size, blend ratio and inherent oxygen species. Fuel Processing Technology, 2017, 159, 67-75.	3.7	22
27	Influence of Inherently Present Oxygen-Functional Groups on Coal Fluidity and Coke Strength. Energy & Fuels, 2018, 32, 1657-1664.	2.5	22
28	Properties of Dust Particles Sampled from Windboxes of an Iron Ore Sintering Plant: Surface Structures of Unburned Carbon. ISIJ International, 2006, 46, 1020-1026.	0.6	21
29	Sulfur tolerance of an inexpensive limonite catalyst for high temperature decomposition of ammonia. Powder Technology, 2008, 180, 184-189.	2.1	21
30	Reduction behavior and crushing strength of carbon-containing iron ore sinters prepared from tar recovered from coke oven gas. Fuel Processing Technology, 2015, 138, 704-713.	3.7	20
31	Chlorine Release during Fixed-Bed Gasification of Coal Chars with Carbon Dioxide. Energy & Fuels, 2013, 27, 5076-5082.	2.5	19
32	Sulfur and Nitrogen Distributions during Coal Carbonization and the Influences of These Elements on Coal Fluidity and Coke Strength. ISIJ International, 2014, 54, 2439-2445.	0.6	19
33	Reactions of Hydrogen Chloride with Carbonaceous Materials and the Formation of Surface Chlorine Species. Energy & Fuels, 2016, 30, 2320-2327.	2.5	19
34	Production of activated carbon from peat by with natural soda ash and effect of nitrogen addition on the development of surface area. Fuel Processing Technology, 2018, 176, 76-84.	3.7	19
35	Reduction behavior and crushing strength of carbon-containing pellet prepared from COG tar. Fuel Processing Technology, 2016, 142, 287-295.	3.7	18
36	Catalytic effect of ion-exchanged calcium on steam gasification of low-rank coal with a circulating fluidized bed reactor. Fuel, 2018, 234, 406-413.	3.4	17

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37	Preparation of pelletized coke by co-carbonization of caking coal and pyrolyzed char modified with tar produced during pyrolysis of woody biomass. Fuel Processing Technology, 2019, 193, 328-337.	3.7	17
38	Several Distinct Types of HCl Evolution during Temperature-Programmed Pyrolysis of High-Rank Coals with Almost the Same Carbon Contents. Energy & Fuels, 2004, 18, 1605-1606.	2.5	15
39	High catalytic performance of magnesium cations-added limonite in the decomposition of ammonia in a simulated syngas-rich fuel gas. Journal of Molecular Catalysis A, 2015, 407, 75-80.	4.8	15
40	Formation of surface chlorine species by low temperature reaction of HCl with metal-doped carbon. Fuel, 2019, 246, 51-59.	3.4	15
41	Evolution profile of gases during coal carbonization and relationship between their amounts and the fluidity or coke strength. Fuel, 2019, 237, 735-744.	3.4	15
42	Influence of ammonia treatment on the CO2 adsorption of activated carbon. Journal of Environmental Chemical Engineering, 2022, 10, 107273.	3.3	15
43	Catalytic decomposition of nitrogen-containing heterocyclic compounds with highly dispersed iron nanoparticles on carbons. Journal of Molecular Catalysis A, 2012, 356, 14-19.	4.8	14
44	Investigation of strength and reduction reactivity during heat treatment in simulated-experimental blast furnace of carbon-containing pellet prepared by vapor deposition of tar to cold-bonded pellet with large particle size. Fuel Processing Technology, 2018, 176, 21-32.	3.7	14
45	Separation of valuable elements from steel making slag by chlorination. Resources, Conservation and Recycling, 2020, 158, 104815.	5.3	14
46	Functional Forms of Carbon and Chlorine in Dust Samples Formed in the Sintering Process of Iron Ores. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2005, 91, 751-756.	0.1	13
47	Effects of Solid Residence Time and Inherent Metal Cations on the Fate of the Nitrogen in Coal during Rapid Pyrolysis. Energy & Fuels, 2014, 28, 5721-5728.	2.5	13
48	Fate of the Chlorine in Coal in the Heating Process. ISIJ International, 2018, 58, 227-235.	0.6	13
49	Iron-catalyzed nitrogen removal as N2 from PAN-derived activated carbon. Applied Catalysis B: Environmental, 2012, 111-112, 614-620.	10.8	12
50	Fate of Coal-Bound Nitrogen during Carbonization of Caking Coals. Energy & Fuels, 2013, 27, 7330-7335.	2.5	11
51	Steam Gasification of Low-Rank Coals with Ion-Exchanged Sodium Catalysts Prepared Using Natural Soda Ash. Energy & Fuels, 2017, 31, 2565-2571.	2.5	11
52	Preparation of a Carbon-Containing Pellet with High Strength and High Reactivity by Vapor Deposition of Tar to a Cold-Bonded Pellet. Energy & Fuels, 2017, 31, 8877-8885.	2.5	11
53	Removal of Hydrogen Sulfide in Simulated Coke Oven Gas with Low-Grade Iron Ore. Energy & Fuels, 2017, 31, 8087-8094.	2.5	11
54	Reduction Rate and Crushing Strength of a Carbon-Containing Pellet Prepared by the Impregnation Method of COG Tar. Energy & Fuels, 2016, 30, 2102-2110.	2.5	10

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55	Steam Gasification of Low-Rank Coal with a Nanoscale Ca/Na Composite Catalyst Prepared by Ion Exchange. Energy & Fuels, 2018, 32, 226-232.	2.5	10
56	Influence of tarry material deposition on low-strength cokes or pyrolyzed chars of low rank coals on the strength. Fuel, 2018, 232, 780-790.	3.4	10
57	Gasification of carbon/carbon composite prepared from pyrolyzed char of low-grade coke and low-rank coal. Powder Technology, 2019, 355, 782-792.	2.1	10
58	Effect of alkaline earth metals on N2 formation during fixed bed pyrolysis of a low rank coal. Fuel Processing Technology, 2004, 85, 1039-1052.	3.7	9
59	Reduction and Nitriding Behavior of Hematite with Ammonia. ISIJ International, 2015, 55, 736-741.	0.6	9
60	Catalytic decomposition of pyridine gas with fine particles of metallic iron formed from limonite. Applied Catalysis A: General, 2015, 499, 133-138.	2.2	9
61	Upgrading Low-Grade Iron Ore through Gangue Removal by a Combined Alkali Roasting and Hydrothermal Treatment. ACS Omega, 2019, 4, 19723-19734.	1.6	9
62	Functional Forms of Nitrogen and Sulfur in Coals and Fate of Heteroatoms during Coal Carbonization. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2012, 98, 161-169.	0.1	7
63	Synthesis of BaTiO₃ nanoparticles from TiO₂-coated BaCO₃ particles derived using a wet-chemical method. Journal of Asian Ceramic Societies, 2014, 2, 68-76.	1.0	7
64	Catalytic Performance of Limonite Ores in the Decomposition of Model Compounds of Biomass-Derived Tar. Energy & Fuels, 2017, 31, 3898-3904.	2.5	7
65	Production of High-Strength Coke from Low-Quality Coals Chemically Modified with Thermoplastic Components. ISIJ International, 2019, 59, 1396-1403.	0.6	7
66	Catalytic Decomposition of Pyridine with Goethite-Rich Limonite in the Coexistence of Fuel Gas or Coke Oven Gas Components. ISIJ International, 2016, 56, 1132-1137.	0.6	7
67	Removal of gangue components from low-grade iron ore by hydrothermal treatment. Hydrometallurgy, 2019, 190, 105159.	1.8	6
68	Removal of hydrogen chloride gas using honeycomb-supported natural soda ash. Chemical Engineering Research and Design, 2020, 156, 138-145.	2.7	6
69	Removal of Hydrogen Sulfide and Ammonia by Goethite-Rich Limonite in the Coexistence of Coke Oven Gas Components. ISIJ International, 2017, 57, 435-442.	0.6	5
70	Fate of Nitrogen and Sulfur during Reduction Process of Carbon-containing Pellet Prepared by Vapor Deposition of Gaseous-Tar and the Influences of the Hetero Elements on the Reduction Behavior and Crushing Strength. ISIJ International, 2018, 58, 460-468.	0.6	5
71	Mercury (II) ion adsorption performance of Cl-loaded carbonaceous material prepared by chlorination of pyrolyzed rice husk char. Journal of Cleaner Production, 2021, 305, 127176.	4.6	5
72	Production of Silicone Tetrachloride from Rice Husk by Chlorination and Performance of Mercury Adsorption from Aqueous Solution of the Chlorinated Residue. ACS Omega, 2020, 5, 29110-29120.	1.6	5

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73	Behavior of boron release and change in the occurrence mode of boron during fixed-bed pyrolysis of coals. Fuel, 2014, 130, 54-59.	3.4	4
74	Coprocessing of Pyrolytic Nitrogen Removal of Low-Rank Coals and Reduction of Limonite Ore. Energy & Fuels, 2017, 31, 3885-3891.	2.5	4
75	Low-Temperature Reactions of HCl with Metal-Doped Carbon. Energy & Fuels, 2018, 32, 6970-6977.	2.5	4
76	Influence of Heating Conditions on the Strength of Coke Produced from Slightly-Caking Coal Containing Chemically-Loaded Thermoplastic Components. ISIJ International, 2019, 59, 1427-1436.	0.6	4
77	Chemical Characterization of Unburned Carbon in Coal Fly Ashes by Use of TPD/TPO and LRS Methods. Environmental Science & Technology, 2015, 49, 5189-5194.	4.6	3
78	Thermal Properties of Carbon-Containing Iron Ore Composite Prepared by Vapor Deposition of Tar for Limonite. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2019, 50, 2259-2272.	1.0	3
79	Production of high-strength and low-gasification reactivity coke from low-grade carbonaceous materials by vapor deposition of tar. Fuel Processing Technology, 2020, 203, 106384.	3.7	3
80	Preparation and evaluation of activated carbon from low-rank coal <i>via</i> alkali activation and its fundamental CO₂ adsorption capacity at ambient temperature under pure pressurized CO₂. Reaction Chemistry and Engineering, 2022, 7, 1429-1446.	1.9	3
81	Removal of hydrogen chloride from simulated coal gasification fuel gases using honeycomb-supported natural soda ash. Fuel, 2022, 317, 122231.	3.4	3
82	Leaching Behavior of the Boron and Fluorine in Fly Ashes Formed in Pulverized Coal Combustion. Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy, 2010, 89, 1166-1172.	0.2	2
83	Formation of molecular nitrogen and hydrogen sulfide during highâ€temperature pyrolysis of coals. Asia-Pacific Journal of Chemical Engineering, 2015, 10, 154-162.	0.8	2
84	Significant Evolution of Hydrogen Fluoride from Coal Chars after Apparently Complete Release of Carbon Dioxide. Energy & Fuels, 2016, 30, 4381-4383.	2.5	2
85	Removal of Organic Sulfur in Hydrocarbon Liquid Model Fuel by Ni-Loaded Carbon Prepared from Lignite. Energy & Fuels, 2018, 32, 12328-12336.	2.5	2
86	Effect of the electronic state on low-rank coals with Ca2+ ion exchange. Journal of Molecular Structure, 2020, 1218, 128544.	1.8	2
87	Adsorption Desulfurization of Organic Sulfur Compounds in Model Fuels by Ni-Loaded Carbon. Kagaku Kogaku Ronbunshu, 2014, 40, 56-64.	0.1	2
88	Influence of Additive Amount and Heating Conditions on the Strength of Coke Prepared from Non-Caking Coal. ISIJ International, 2019, 59, 1419-1426.	0.6	2
89	Preparation of coke from biomass char modified by vapour deposition of tar generated during pyrolysis of woody biomass. Ironmaking and Steelmaking, 2022, 49, 646-657.	1.1	2
90	Quantum chemical study on adsorption of hydrogen chloride on Zn-doped carbon materials. Environmental Technology and Innovation, 2020, 19, 100883.	3.0	1

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91	Electronic State of Low-Rank Coals with Exchanged Sodium Cations. ACS Omega, 2020, 5, 1688-1697.	1.6	1
92	Strength and Gasification Reactivity of Coke Prepared by Blending a Ca/C Composite and Coal. ISIJ International, 2021, 61, 2200-2210.	0.6	1
93	Influence of Heating Conditions on the Strength of Coke Produced from Slightly-Caking Coal Containing Chemically-Loaded Thermoplastic Components. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2021, 107, 24-34.	0.1	1
94	Evolution of Mercury from Iron Ores in Temperature-Programmed Heat Treatments. ISIJ International, 2022, 62, 20-28.	0.6	1
95	Fate of the Chlorine in Coal in the Heating Process. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2017, 103, 443-450.	0.1	0
96	Production of High-Strength Coke from Low-Quality Coals Chemically Modified with Thermoplastic Components. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2021, 107, 15-23.	0.1	0
97	Influence of Additive Amount and Heating Conditions on the Strength of Coke Prepared from Non-Caking Coal. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2021, 107, 35-43.	0.1	0
98	Evaluation of mercury form in iron ore through sequential leaching and temperature-programmed heat treatment methods. Fuel, 2022, 308, 121953.	3.4	0
99	Behavior of mercury release from iron ores during temperature-programmed heat treatment in air. Environmental Science and Pollution Research, 2021, 28, 66496-66500.	2.7	0
100	Fate of Boron and Selenium during Pulverized Coal Combustion. Kagaku Kogaku Ronbunshu, 2015, 41, 340-349.	0.1	0