

# Andrei Veksha

## List of Publications by Year in descending order

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100  
papers

3,592  
citations

136950

32  
h-index

161849

54  
g-index

100  
all docs

100  
docs citations

100  
times ranked

3093  
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhanced photocatalytic degradation of bisphenol A with Ag-decorated S-doped g-C <sub>3</sub> N <sub>4</sub> under solar irradiation: Performance and mechanistic studies. <i>Chemical Engineering Journal</i> , 2018, 333, 739-749.	12.7	209
2	Fate and distribution of heavy metals during thermal processing of sewage sludge. <i>Fuel</i> , 2018, 226, 721-744.	6.4	203
3	Insights into the thermolytic transformation of lignocellulosic biomass waste to redox-active carbocatalyst: Durability of surface active sites. <i>Applied Catalysis B: Environmental</i> , 2018, 233, 120-129.	20.2	169
4	Chemical recycling of plastic waste for sustainable material management: A prospective review on catalysts and processes. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 154, 111866.	16.4	110
5	Processing of flexible plastic packaging waste into pyrolysis oil and multi-walled carbon nanotubes for electrocatalytic oxygen reduction. <i>Journal of Hazardous Materials</i> , 2020, 387, 121256.	12.4	103
6	Activated multi-walled carbon nanotubes decorated with zero valent nickel nanoparticles for arsenic, cadmium and lead adsorption from wastewater in a batch and continuous flow modes. <i>Journal of Hazardous Materials</i> , 2022, 423, 126993.	12.4	96
7	Removal and biodegradation of naphthenic acids by biochar and attached environmental biofilms in the presence of co-contaminating metals. <i>Bioresource Technology</i> , 2016, 216, 352-361.	9.6	90
8	Effects of sewage sludge organic and inorganic constituents on the properties of pyrolysis products. <i>Energy Conversion and Management</i> , 2019, 196, 1410-1419.	9.2	89
9	Insights into the speciation of heavy metals during pyrolysis of industrial sludge. <i>Science of the Total Environment</i> , 2019, 691, 232-242.	8.0	86
10	Environmental impact assessment of converting flexible packaging plastic waste to pyrolysis oil and multi-walled carbon nanotubes. <i>Journal of Hazardous Materials</i> , 2020, 390, 121449.	12.4	86
11	Taguchi optimization design of diameter-controlled synthesis of multi walled carbon nanotubes for the adsorption of Pb(II) and Ni(II) from chemical industry wastewater. <i>Chemosphere</i> , 2021, 266, 128937.	8.2	83
12	Catalytically active nitrogen-doped porous carbon derived from biowastes for organics removal via peroxydisulfate activation. <i>Chemical Engineering Journal</i> , 2019, 374, 947-957.	12.7	82
13	A hot syngas purification system integrated with downdraft gasification of municipal solid waste. <i>Applied Energy</i> , 2019, 237, 227-240.	10.1	76
14	The influence of porosity and surface oxygen groups of peat-based activated carbons on benzene adsorption from dry and humid air. <i>Carbon</i> , 2009, 47, 2371-2378.	10.3	68
15	Conversion of non-condensable pyrolysis gases from plastics into carbon nanomaterials: Effects of feedstock and temperature. <i>Journal of Analytical and Applied Pyrolysis</i> , 2017, 124, 16-24.	5.5	64
16	Life cycle assessment of plastic grocery bags and their alternatives in cities with confined waste management structure: A Singapore case study. <i>Journal of Cleaner Production</i> , 2021, 278, 123956.	9.3	63
17	Upgrading of non-condensable pyrolysis gas from mixed plastics through catalytic decomposition and dechlorination. <i>Fuel Processing Technology</i> , 2018, 170, 13-20.	7.2	59
18	Plastic derived carbon nanotubes for electrocatalytic oxygen reduction reaction: Effects of plastic feedstock and synthesis temperature. <i>Electrochemistry Communications</i> , 2019, 101, 11-18.	4.7	59

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19	Pyrolysis derived char from municipal and industrial sludge: Impact of organic decomposition and inorganic accumulation on the fuel characteristics of char. <i>Waste Management</i> , 2019, 83, 131-141.	7.4	59
20	In situ grown metallic nickel from Xâ€“Ni (X=La, Mg, Sr) oxides for converting plastics into carbon nanotubes: Influence of metalâ€“support interaction. <i>Journal of Cleaner Production</i> , 2020, 258, 120633.	9.3	58
21	Enhanced activation of peroxydisulfate by CuO decorated on hexagonal boron nitride for bisphenol A removal. <i>Chemical Engineering Journal</i> , 2020, 393, 124714.	12.7	55
22	Poisoning effects of H <sub>2</sub> S and HCl on the naphthalene steam reforming and water-gas shift activities of Ni and Fe catalysts. <i>Fuel</i> , 2019, 241, 1008-1018.	6.4	54
23	Carbon based copper(II) phthalocyanine catalysts for electrochemical CO <sub>2</sub> reduction: Effect of carbon support on electrocatalytic activity. <i>Carbon</i> , 2020, 168, 245-253.	10.3	53
24	Thermodynamic analyses of synthetic natural gas production via municipal solid waste gasification, high-temperature water electrolysis and methanation. <i>Energy Conversion and Management</i> , 2019, 202, 112160.	9.2	46
25	Pyrolysis of wood to biochar: Increasing yield while maintaining microporosity. <i>Bioresource Technology</i> , 2014, 153, 173-179.	9.6	41
26	Evaluation of the cycling performance of a sorbent for H <sub>2</sub> S removal and simulation of desulfurization-regeneration processes. <i>Chemical Engineering Journal</i> , 2017, 326, 1255-1265.	12.7	38
27	Application of system dynamics modeling for evaluation of different recycling scenarios in Singapore. <i>Journal of Material Cycles and Waste Management</i> , 2017, 19, 1177-1185.	3.0	36
28	Ni-Zn-based nanocomposite loaded on cordierite mullite ceramic for syngas desulfurization: Performance evaluation and regeneration studies. <i>Chemical Engineering Journal</i> , 2018, 351, 230-239.	12.7	36
29	Influence of surface morphology on the performance of nanostructured ZnO-loaded ceramic honeycomb for syngas desulfurization. <i>Fuel</i> , 2018, 211, 591-599.	6.4	35
30	Desulfurization sorbents for green and clean coal utilization and downstream toxics reduction: A review and perspectives. <i>Journal of Cleaner Production</i> , 2020, 273, 123080.	9.3	35
31	Ordered mesoporous Zn-based supported sorbent synthesized by a new method for high-efficiency desulfurization of hot coal gas. <i>Chemical Engineering Journal</i> , 2018, 353, 273-287.	12.7	33
32	Sal wood sawdust derived highly mesoporous carbon as prospective electrode material for vanadium redox flow batteries. <i>Journal of Electroanalytical Chemistry</i> , 2019, 834, 94-100.	3.8	33
33	Enhancing biochar yield by co-pyrolysis of bio-oil with biomass: Impacts of potassium hydroxide addition and air pretreatment prior to co-pyrolysis. <i>Bioresource Technology</i> , 2014, 171, 88-94.	9.6	32
34	Catalytic processing of non-condensable pyrolysis gas from plastics: Effects of calcium supports on nickel-catalyzed decomposition of hydrocarbons and HCl sorption. <i>Chemical Engineering Science</i> , 2018, 189, 311-319.	3.8	32
35	Environmental footprint of voltammetric sensors based on screen-printed electrodes: An assessment towards â€œgreenâ€“sensor manufacturing. <i>Chemosphere</i> , 2021, 278, 130462.	8.2	32
36	Microwave effects on the structure of CeO <sub>2</sub> -doped zinc oxide sorbents for H <sub>2</sub> S removal. <i>Fuel</i> , 2015, 146, 56-59.	6.4	31

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37	Catalytic activities and resistance to HCl poisoning of Ni-based catalysts during steam reforming of naphthalene. <i>Applied Catalysis A: General</i> , 2018, 557, 25-38.	4.3	29
38	Barium aluminate improved iron ore for the chemical looping combustion of syngas. <i>Applied Energy</i> , 2020, 272, 115236.	10.1	29
39	Analytical assessment of tar generated during gasification of municipal solid waste: Distribution of GC-MS detectable tar compounds, undetectable tar residues and inorganic impurities. <i>Fuel</i> , 2020, 268, 117348.	6.4	29
40	Cobalt and nitrogen co-doped porous carbon/carbon nanotube hybrids anchored with nickel nanoparticles as high-performance electrocatalysts for oxygen reduction reactions. <i>Nanoscale</i> , 2020, 12, 13028-13033.	5.6	29
41	Distribution and modeling of tar compounds produced during downdraft gasification of municipal solid waste. <i>Renewable Energy</i> , 2019, 136, 1294-1303.	8.9	27
42	Rational design of electrospun nanofibers for gas purification: Principles, opportunities, and challenges. <i>Chemical Engineering Journal</i> , 2022, 446, 137099.	12.7	27
43	The removal of methyl orange from aqueous solution by biochar and activated carbon under microwave irradiation and in the presence of hydrogen peroxide. <i>Journal of Environmental Chemical Engineering</i> , 2015, 3, 1452-1458.	6.7	26
44	Ba-Al-decorated iron ore as bifunctional oxygen carrier and HCl sorbent for chemical looping combustion of syngas. <i>Combustion and Flame</i> , 2021, 223, 230-242.	5.2	26
45	Flexible packaging plastic waste – environmental implications, management solutions, and the way forward. <i>Current Opinion in Chemical Engineering</i> , 2021, 32, 100684.	7.8	26
46	Multiwall carbon nanotubes derived from plastic packaging waste as a high-performance electrode material for supercapacitors. <i>International Journal of Energy Research</i> , 2021, 45, 19611-19622.	4.5	26
47	Graphene-like carbon nanosheets grown over alkali-earth metal oxides: Effects of chemical composition and physico-chemical properties. <i>Carbon</i> , 2020, 159, 378-389.	10.3	25
48	Mesoporous Zn-Fe-based binary metal oxide sorbent with sheet-shaped morphology: Synthesis and application for highly efficient desulfurization of hot coal gas. <i>Chemical Engineering Journal</i> , 2020, 389, 123750.	12.7	25
49	Heteroatom doped carbon nanosheets from waste tires as electrode materials for electrocatalytic oxygen reduction reaction: Effect of synthesis techniques on properties and activity. <i>Carbon</i> , 2020, 167, 104-113.	10.3	25
50	Technical and environmental assessment of laboratory scale approach for sustainable management of marine plastic litter. <i>Journal of Hazardous Materials</i> , 2022, 421, 126717.	12.4	25
51	Activation of Aspen Wood with Carbon Dioxide and Phosphoric Acid for Removal of Total Organic Carbon from Oil Sands Produced Water: Increasing the Yield with Bio-Oil Recycling. <i>Materials</i> , 2016, 9, 20.	2.9	24
52	Insights into the single and binary adsorption of copper(II) and nickel(II) on hexagonal boron nitride: Performance and mechanistic studies. <i>Journal of Environmental Chemical Engineering</i> , 2019, 7, 102872.	6.7	24
53	High temperature slagging gasification of municipal solid waste with biomass charcoal as a greener auxiliary fuel. <i>Journal of Hazardous Materials</i> , 2022, 423, 127057.	12.4	24
54	Hot Coal Gas Desulfurization Using Regenerable ZnO/MCM41 Prepared via One-Step Hydrothermal Synthesis. <i>Energy &amp; Fuels</i> , 2017, 31, 9814-9823.	5.1	23

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55	Weakening the strong Fe-La interaction in A-site-deficient perovskite via Ni substitution to promote the thermocatalytic synthesis of carbon nanotubes from plastics. <i>Journal of Hazardous Materials</i> , 2021, 403, 123642.	12.4	23
56	Chemical looping combustion-adsorption of HCl-containing syngas using alkaline-earth coated iron ore composites for simultaneous purification and combustion enhancement. <i>Chemical Engineering Journal</i> , 2021, 417, 129226.	12.7	23
57	Upcycling of exhausted reverse osmosis membranes into value-added pyrolysis products and carbon dots. <i>Journal of Hazardous Materials</i> , 2021, 419, 126472.	12.4	23
58	In situ catalytic reforming of plastic pyrolysis vapors using MSW incineration ashes. <i>Environmental Pollution</i> , 2021, 276, 116681.	7.5	22
59	Desulfurization of Hot Coal Gas over Regenerable Low-Cost Fe <sub>2</sub> O <sub>3</sub> /Mesoporous Al <sub>2</sub> O <sub>3</sub> Prepared by the Sol-Gel Method. <i>Energy &amp; Fuels</i> , 2017, 31, 13921-13932.	5.1	21
60	New Way of Removing Hydrogen Sulfide at a High Temperature: Microwave Desulfurization Using an Iron-Based Sorbent Supported on Active Coke. <i>Energy &amp; Fuels</i> , 2017, 31, 4263-4272.	5.1	20
61	Conversion of Spent Coffee Beans to Electrode Material for Vanadium Redox Flow Batteries. <i>Batteries</i> , 2018, 4, 56.	4.5	20
62	A novel real-time monitoring and control system for waste-to-energy gasification process employing differential temperature profiling of a downdraft gasifier. <i>Journal of Environmental Management</i> , 2019, 234, 65-74.	7.8	20
63	Microwave heating motivated performance promotion and kinetic study of iron oxide sorbent for coal gas desulfurization. <i>Fuel</i> , 2020, 267, 117215.	6.4	20
64	Regenerable Co-ZnO-based nanocomposites for high-temperature syngas desulfurization. <i>Fuel Processing Technology</i> , 2020, 201, 106344.	7.2	20
65	Support effects on thermocatalytic pyrolysis-reforming of polyethylene over impregnated Ni catalysts. <i>Applied Catalysis A: General</i> , 2021, 622, 118222.	4.3	20
66	Upgrading waste plastic derived pyrolysis gas via chemical looping cracking-gasification using Ni-Fe-Al redox catalysts. <i>Chemical Engineering Journal</i> , 2022, 438, 135580.	12.7	20
67	Nickel-based catalysts for steam reforming of naphthalene utilizing gasification slag from municipal solid waste as a support. <i>Fuel</i> , 2019, 254, 115561.	6.4	19
68	Synthesis of CaCr <sub>2</sub> O <sub>4</sub> /carbon nanoplatelets from non-condensable pyrolysis gas of plastics for oxygen reduction reaction and charge storage. <i>Journal of Electroanalytical Chemistry</i> , 2019, 849, 113368.	3.8	18
69	Iron ore modified with alkaline earth metals for the chemical looping combustion of municipal solid waste derived syngas. <i>Journal of Cleaner Production</i> , 2021, 282, 124467.	9.3	18
70	Effective H <sub>2</sub> S control during chemical looping combustion by iron ore modified with alkaline earth metal oxides. <i>Energy</i> , 2021, 218, 119548.	8.8	17
71	Converting polyolefin plastics into few-walled carbon nanotubes via a tandem catalytic process: Importance of gas composition and system configuration. <i>Journal of Hazardous Materials</i> , 2022, 435, 128949.	12.4	17
72	The effects of temperature on the activation of peat char in the presence of high calcium content. <i>Journal of Analytical and Applied Pyrolysis</i> , 2008, 83, 131-136.	5.5	16

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73	Oxygen carriers from incineration bottom ash for chemical looping combustion of syngas: Effect of composition on combustion efficiency. <i>Chemical Engineering Journal</i> , 2021, 405, 127068.	12.7	16
74	In Situ Preparation and Regeneration Behaviors of Zinc Oxide/Red Clay Desulfurization Sorbents. <i>Energy &amp; Fuels</i> , 2017, 31, 1015-1022.	5.1	15
75	Fe-assisted catalytic chemical vapor deposition of graphene-like carbon nanosheets over SrO. <i>Carbon</i> , 2021, 171, 444-454.	10.3	15
76	Advanced Ni tar reforming catalysts resistant to syngas impurities: Current knowledge, research gaps and future prospects. <i>Fuel</i> , 2022, 318, 123602.	6.4	15
77	Dual-functional witherite in improving chemical looping performance of iron ore and simultaneous adsorption of HCl in syngas at high temperature. <i>Chemical Engineering Journal</i> , 2021, 413, 127538.	12.7	14
78	Tailoring Fe <sub>2</sub> O <sub>3</sub> –Al <sub>2</sub> O <sub>3</sub> catalyst structure and activity via hydrothermal synthesis for carbon nanotubes and hydrogen production from polyolefin plastics. <i>Chemosphere</i> , 2022, 297, 134148.	8.2	14
79	Few-walled carbon nanotubes derived from shoe waste plastics: Effect of feedstock composition on synthesis, properties and application as CO <sub>2</sub> reduction electrodes. <i>Journal of Cleaner Production</i> , 2022, 356, 131868.	9.3	13
80	Structure Characteristics and Hot-Coal-Gas Desulfurization Properties of Zn-Based Sorbents Supported on Mesoporous Silica with Different Pore-Arrangement Patterns: A Comparison Study. <i>Energy &amp; Fuels</i> , 2021, 35, 2456-2467.	5.1	12
81	Insights into the effects of metal-ion doping on the structure and hot-coal-gas desulfurization properties of Zn-based sorbents supported on SBA-15. <i>Fuel</i> , 2022, 315, 123198.	6.4	12
82	Insights to the microwave effect in the preparation of sorbent for H <sub>2</sub> S removal: Desulfurization kinetics and characterization. <i>Fuel</i> , 2017, 203, 233-243.	6.4	11
83	Fe-Based Sorbent for Hot Coal Gas under Microwave Irradiation: Desulfurization Performance and Microwave Effects. <i>Energy &amp; Fuels</i> , 2019, 33, 9004-9013.	5.1	11
84	Modulating local environment of Ni with W for synthesis of carbon nanotubes and hydrogen from plastics. <i>Journal of Cleaner Production</i> , 2022, 352, 131620.	9.3	11
85	Effect of alkali earth metal doping on the CuO/Al <sub>2</sub> O <sub>3</sub> oxygen carrier agglomeration resistance during chemical looping combustion. <i>Journal of Cleaner Production</i> , 2022, 366, 132970.	9.3	11
86	Hydrogen bromide in syngas: Effects on tar reforming, water gas-shift activities and sintering of Ni-based catalysts. <i>Applied Catalysis B: Environmental</i> , 2021, 280, 119435.	20.2	9
87	Thermal behavior of Cu-Mg-Al-Ba/Sr bifunctional composites during chemical looping combustion and HCl adsorption of MSW syngas. <i>Chemical Engineering Journal</i> , 2022, 430, 132871.	12.7	8
88	Temperature-dependent synthesis of multi-walled carbon nanotubes and hydrogen from plastic waste over A-site-deficient perovskite La <sub>0.8</sub> Ni <sub>1-x</sub> CoxO <sub>3-<math>\delta</math></sub> . <i>Chemosphere</i> , 2022, 291, 132831.	8.2	8
89	Highly active and poison-tolerant nickel catalysts for tar reforming synthesized through controlled hydrothermal synthesis. <i>Applied Catalysis A: General</i> , 2020, 607, 117779.	4.3	7
90	Adsorption and Desorption Behavior of Benzene on Activated Carbons from Different Precursors in Dry and Humid Conditions. <i>Journal of Chemical Engineering of Japan</i> , 2012, 45, 387-394.	0.6	5

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91	Application of terpyridyl ligands to tune the optical and electrochemical properties of a conducting polymer. RSC Advances, 2018, 8, 29505-29512.	3.6	4
92	Polyterthiophenes Cross-Linked with Terpyridyl Metal Complexes for Molecular Architecture of Optically and Electrochemically Tunable Materials. ChemElectroChem, 2020, 7, 4453-4459.	3.4	4
93	Sorbents for high-temperature removal of alkali metals and HCl from municipal solid waste derived syngas. Fuel, 2022, 321, 124058.	6.4	4
94	The Effects of Washing Techniques on Thermal Combustion Properties of Sewage Sludge Chars. International Journal of Environmental Research, 2021, 15, 285-297.	2.3	3
95	Carbon nanosheet-carbon nanocage encapsulated Cu composite from chemical vapor deposition of real-world plastic waste for tailored CO <sub>2</sub> conversion to various products. Applied Materials Today, 2021, 25, 101207.	4.3	3
96	Unravelling the significance of catalyst reduction stage for high tar reforming activity in the presence of syngas impurities. Applied Catalysis A: General, 2022, 642, 118711.	4.3	3
97	Preparation of mesoporous MCM-41 supported zinc sorbents by microwave in-situ oxidation for H <sub>2</sub> S removal in coal gas. Canadian Journal of Chemical Engineering, 2020, 98, 1729-1740.	1.7	2
98	Selective leaching of scandium and yttrium from red mud induced by hydrothermal treatment. Journal of Chemical Technology and Biotechnology, 2021, 96, 2620-2629.	3.2	1
99	Conversion of reverse osmosis membranes into metal-free carbocatalyst for electrochemical syngas production. Journal of CO <sub>2</sub> Utilization, 2022, 58, 101908.	6.8	1
100	Benzene Adsorption from Dry and Humid Air on Activated Carbons from Japanese Cypress Wood Prepared by CO <sub>2</sub> and K <sub>2</sub> CO <sub>3</sub> Activation. International Journal of Chemical Engineering and Applications (IJCEA), 2012, , 1-5.	0.3	0