

Cristian Contescu

List of Publications by Citations

Source: <https://exaly.com/author-pdf/5960981/cristian-contescu-publications-by-citations.pdf>
Version: 2024-04-09

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

98 papers	3,241 citations	31 h-index	55 g-index
113 ext. papers	3,627 ext. citations	7.6 avg, IF	5.09 L-index

#	Paper	IF	Citations
98	Methods for Preparation of Catalytic Materials. <i>Chemical Reviews</i> , 1995 , 95, 477-510	68.1	465
97	Characterization of the surfaces of activated carbons in terms of their acidity constant distributions. <i>Carbon</i> , 1993 , 31, 1193-1202	10.4	169
96	Surface acidity of carbons characterized by their continuous pK distribution and Boehm titration. <i>Carbon</i> , 1997 , 35, 83-94	10.4	148
95	Heterogeneity of proton binding sites at the oxide/solution interface. <i>Langmuir</i> , 1993 , 9, 1754-1765	4	148
94	Ultralight carbon aerogel from nanocellulose as a highly selective oil absorption material. <i>Cellulose</i> , 2015 , 22, 435-447	5.5	139
93	Detection of Hydrogen Spillover in Palladium-Modified Activated Carbon Fibers during Hydrogen Adsorption. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 5886-5890	3.8	137
92	Topological defects: origin of nanopores and enhanced adsorption performance in nanoporous carbon. <i>Small</i> , 2012 , 8, 3283-8	11	113
91	Crown ethers in graphene. <i>Nature Communications</i> , 2014 , 5, 5389	17.4	102
90	Acid buffering capacity of basic carbons revealed by their continuous pK distribution. <i>Carbon</i> , 1998 , 36, 247-258	10.4	91
89	The effect of microstructure on air oxidation resistance of nuclear graphite. <i>Carbon</i> , 2012 , 50, 3354-3366	10.4	65
88	Single Pd atoms in activated carbon fibers and their contribution to hydrogen storage. <i>Carbon</i> , 2011 , 49, 4050-4058	10.4	65
87	Kinetic effect of Pd additions on the hydrogen uptake of chemically-activated ultramicroporous carbon. <i>Carbon</i> , 2010 , 48, 2361-2364	10.4	62
86	Practical aspects for characterizing air oxidation of graphite. <i>Journal of Nuclear Materials</i> , 2008 , 381, 15-24	3.3	61
85	Heterogeneity of Hydroxyl and Deuteroxyl Groups on the Surface of TiO ₂ Polymorphs. <i>Journal of Colloid and Interface Science</i> , 1996 , 180, 149-161	9.3	61
84	Atypical hydrogen uptake on chemically-activated, ultramicroporous carbon. <i>Carbon</i> , 2010 , 48, 1331-1340	10.4	60
83	Tritium Control and Capture in Salt-Cooled Fission and Fusion Reactors: Status, Challenges, and Path Forward. <i>Nuclear Technology</i> , 2017 , 197, 119-139	1.4	58
82	Proton Affinity Distributions of TiO ₂ -SiO ₂ and ZrO ₂ -SiO ₂ Mixed Oxides and Their Relationship to Catalyst Activities for 1-Butene Isomerization. <i>Journal of Catalysis</i> , 1995 , 157, 244-258	7.3	49

81	Activated Carbons Derived from High-Temperature Pyrolysis of Lignocellulosic Biomass. <i>Journal of Carbon Research</i> , 2018 , 4, 51	3.3	49
80	Hydrogen confinement in carbon nanopores: extreme densification at ambient temperature. <i>Journal of the American Chemical Society</i> , 2011 , 133, 13794-7	16.4	48
79	Thermal treatment effects on charge storage performance of graphene-based materials for supercapacitors. <i>ACS Applied Materials & Interfaces</i> , 2012 , 4, 3239-46	9.5	47
78	Effect of alumina supports on the properties of supported nickel catalysts. <i>Applied Catalysis</i> , 1991 , 73, 289-312		44
77	The effect of pH on the adsorption of palladium (II) complexes on alumina. <i>Applied Catalysis</i> , 1987 , 33, 259-271		44
76	Visualization of supercritical water pseudo-boiling at Widom line crossover. <i>Nature Communications</i> , 2019 , 10, 4114	17.4	39
75	Advanced surface and microstructural characterization of natural graphite anodes for lithium ion batteries. <i>Carbon</i> , 2014 , 72, 393-401	10.4	39
74	Pore structure development in oxidized IG-110 nuclear graphite. <i>Journal of Nuclear Materials</i> , 2012 , 430, 229-238	3.3	39
73	Modern approaches to studying gas adsorption in nanoporous carbons. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 9341	13	37
72	Thermodynamics of Proton Binding at the Alumina/Aqueous Solution Interface. A Phenomenological Approach. <i>The Journal of Physical Chemistry</i> , 1994 , 98, 4327-4335		37
71	Understanding the reaction of nuclear graphite with molecular oxygen: Kinetics, transport, and structural evolution. <i>Journal of Nuclear Materials</i> , 2017 , 493, 343-367	3.3	35
70	Clustering of water molecules in ultramicroporous carbon: In-situ small-angle neutron scattering. <i>Carbon</i> , 2017 , 111, 681-688	10.4	34
69	The role of destabilization of palladium hydride in the hydrogen uptake of Pd-containing activated carbons. <i>Nanotechnology</i> , 2009 , 20, 204011	3.4	33
68	Molten salt reactor waste and effluent management strategies: A review. <i>Nuclear Engineering and Design</i> , 2019 , 345, 94-109	1.8	32
67	Catalyst Preparation Variables That Affect the Creation of Active Sites for HDS on Co/Mo/Al ₂ O ₃ Catalytic Materials. <i>Journal of Catalysis</i> , 1996 , 162, 66-75	7.3	30
66	Investigation of morphology and hydrogen adsorption capacity of disordered carbons. <i>Carbon</i> , 2014 , 80, 82-90	10.4	28
65	SANS investigations of CO ₂ adsorption in microporous carbon. <i>Carbon</i> , 2015 , 95, 535-544	10.4	28
64	Isotope effect on adsorbed quantum phases: diffusion of H ₂ and D ₂ in nanoporous carbon. <i>Physical Review Letters</i> , 2013 , 110, 236102	7.4	26

63	STEM imaging of single Pd atoms in activated carbon fibers considered for hydrogen storage. <i>Carbon</i> , 2011 , 49, 4059-4063	10.4	24
62	Effect of calcination temperature of alumina on the adsorption/impregnation of Pd(II) compounds. <i>Journal of Catalysis</i> , 1991 , 132, 422-431	7.3	23
61	Using a New Finite Slit Pore Model for NLDFT Analysis of Carbon Pore Structure. <i>Adsorption Science and Technology</i> , 2011 , 29, 769-780	3.6	22
60	Penetration depth and transient oxidation of graphite by oxygen and water vapor. <i>Journal of Nuclear Materials</i> , 2009 , 393, 518-521	3.3	22
59	Microstructure-Dependent Gas Adsorption: Accurate Predictions of Methane Uptake in Nanoporous Carbons. <i>Journal of Chemical Theory and Computation</i> , 2014 , 10, 1-4	6.4	21
58	Restricted dynamics of molecular hydrogen confined in activated carbon nanopores. <i>Carbon</i> , 2012 , 50, 1071-1082	10.4	21
57	Temperature-programmed reduction and oxidation of nickel supported on WO ₃ /Al ₂ O ₃ composite oxides. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1993 , 89, 2075-2083		21
56	Oxidation of PCEA nuclear graphite by low water concentrations in helium. <i>Journal of Nuclear Materials</i> , 2014 , 453, 225-232	3.3	20
55	Thermal Induced Evolution of Chlorine-Containing Precursors in Impregnated Pd/Al ₂ O ₃ Catalysts. <i>Langmuir</i> , 1995 , 11, 2031-2040	4	20
54	Local Atomic Density of Microporous Carbons. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 2946-2951	3.8	19
53	The effect of processing conditions on microstructure of Pd-containing activated carbon fibers. <i>Carbon</i> , 2008 , 46, 54-61	10.4	18
52	1-pK multisites description of charge development at the aqueous alumina interface. Adsorption of Pd(II)amine complexes. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1993 , 89, 4091-4099		18
51	Chemistry of surface tungsten species on tungsten trioxide/alumina composite oxides under aqueous conditions. <i>The Journal of Physical Chemistry</i> , 1993 , 97, 10152-10157		18
50	Surface area determination of supported oxides: WO ₃ /Al ₂ O ₃ . <i>Journal of Catalysis</i> , 1991 , 129, 195-201	7.3	17
49	Effective gaseous diffusion coefficients of select ultra-fine, super-fine and medium grain nuclear graphite. <i>Carbon</i> , 2018 , 136, 369-379	10.4	15
48	Hydration level dependence of the microscopic dynamics of water adsorbed in ultramicroporous carbon. <i>Carbon</i> , 2017 , 111, 705-712	10.4	15
47	Selection of water-dispersible carbon black for fabrication of uranium oxycarbide microspheres. <i>Journal of Nuclear Materials</i> , 2008 , 375, 38-51	3.3	14
46	Selective ion exchange of palladium on alumina-silica composite oxides. <i>Applied Catalysis</i> , 1991 , 74, 95-108		14

45	Development of mesopores in superfine grain graphite neutron-irradiated at high fluence. <i>Carbon</i> , 2019 , 141, 663-675	10.4	14
44	The Use of Proton Affinity Distributions for the Characterization of Active Sites of Alumina-Supported CoMo Catalysts. <i>Journal of Catalysis</i> , 1996 , 158, 411-419	7.3	13
43	Beyond the classical kinetic model for chronic graphite oxidation by moisture in high temperature gas-cooled reactors. <i>Carbon</i> , 2018 , 127, 158-169	10.4	13
42	Laser ultrasonic assessment of the effects of porosity and microcracking on the elastic moduli of nuclear graphites. <i>Journal of Nuclear Materials</i> , 2016 , 471, 80-91	3.3	12
41	Properties of immobile hydrogen confined in microporous carbon. <i>Carbon</i> , 2017 , 117, 383-392	10.4	11
40	Bimodal mesoporous carbon synthesized from large organic precursor and amphiphilic tri-block copolymer by self-assembly. <i>Microporous and Mesoporous Materials</i> , 2012 , 155, 71-74	5.3	11
39	Modeling the effects of oxidation-induced porosity on the elastic moduli of nuclear graphites. <i>Carbon</i> , 2019 , 141, 304-315	10.4	11
38	Another view of the surface properties of high surface area alumina. <i>Applied Catalysis A: General</i> , 1994 , 118, L5-L10	5.1	10
37	A study of the acidic properties of pure and composite oxides by inverse gas chromatography at infinite dilution. <i>Journal of Catalysis</i> , 1991 , 131, 433-444	7.3	10
36	Chemical compatibility of silicon carbide in molten fluoride salts for the fluoride salt-cooled high temperature reactor. <i>Journal of Nuclear Materials</i> , 2019 , 524, 119-134	3.3	9
35	Chemical kinetics parameters and model validation for the gasification of PCEA nuclear graphite. <i>Journal of Nuclear Materials</i> , 2014 , 444, 112-128	3.3	9
34	Thermophysical property and pore structure evolution in stressed and non-stressed neutron irradiated IG-110 nuclear graphite. <i>Journal of Nuclear Materials</i> , 2016 , 476, 102-109	3.3	8
33	The Influence of Electropositive and Electronegative Elements on Proton Binding to Gamma Al ₂ O ₃ in Aqueous Suspensions. <i>Journal of Colloid and Interface Science</i> , 1994 , 165, 66-71	9.3	8
32	Oxidation Behavior of Matrix Graphite and Its Effect on Compressive Strength. <i>Science and Technology of Nuclear Installations</i> , 2017 , 2017, 1-6	0.6	7
31	Determination of dissociation constants of weak acids by deconvolution of proton binding isotherms derived from potentiometric data. <i>Journal of Solution Chemistry</i> , 1996 , 25, 877-894	1.8	7
30	Effect of potassium-doping on the microstructure development in polyfurfuryl alcohol derived activated carbon. <i>Carbon</i> , 2012 , 50, 5278-5285	10.4	6
29	Tetrahydrofuran-induced K and Li doping onto poly(furfuryl alcohol)-derived activated carbon (PFAC): influence on microstructure and H ₂ sorption properties. <i>Langmuir</i> , 2012 , 28, 5669-77	4	6
28	Proton affinity distributions: A scientific basis for the design and construction of supported metal catalysts. <i>Studies in Surface Science and Catalysis</i> , 1995 , 91, 237-252	1.8	6

27	Understanding the local structure of disordered carbons from cellulose and lignin. <i>Wood Science and Technology</i> , 2021 , 55, 587-606	2.5	6
26	Protection of graphite from salt and gas permeation in molten salt reactors. <i>Journal of Nuclear Materials</i> , 2020 , 534, 152119	3.3	6
25	Lignin-Derived Carbon Fibers as Efficient Heterogeneous Solid Acid Catalysts for Esterification of Oleic Acid. <i>MRS Advances</i> , 2018 , 3, 2865-2873	0.7	5
24	Phase Transition of H in Subnanometer Pores Observed at 75 K. <i>ACS Nano</i> , 2017 , 11, 11617-11631	16.7	4
23	Density Change of an Oxidized Nuclear Graphite by Acoustic Microscopy and Image Processing. <i>Journal of Engineering for Gas Turbines and Power</i> , 2009 , 131,	1.7	4
22	Nanoporous Carbon: Topological Defects: Origin of Nanopores and Enhanced Adsorption Performance in Nanoporous Carbon (Small 21/2012). <i>Small</i> , 2012 , 8, 3282-3282	11	3
21	Water transport in a non-aqueous, polypyrrole electrochemical cell. <i>Sensors and Actuators B: Chemical</i> , 2006 , 114, 248-253	8.5	3
20	Brønsted-type relationship for surface active sites on solid acid catalysts: 1-butene isomerization on TiO ₂ ?SiO ₂ , ZrO ₂ ?SiO ₂ , and Al ₂ O ₃ ?SiO ₂ mixed oxide catalysts. <i>The Chemical Engineering Journal and the Biochemical Engineering Journal</i> , 1996 , 64, 265-272		3
19	Kinetic method for the characterization of Brønsted sites on oxide surfaces. Part I. Trimethylorthobenzoate hydrolysis over a series of Al ₂ O ₃ SiO ₂ mixed oxides. <i>Journal of Molecular Catalysis A</i> , 1995 , 102, 175-191		3
18	Progress Report on Graphite-Salt Intrusion Studies 2020 ,		3
17	Nitrogen adsorption data, FIB-SEM tomography and TEM micrographs of neutron-irradiated superfine grain graphite. <i>Data in Brief</i> , 2018 , 21, 2643-2650	1.2	3
16	Theory and application of laser ultrasonic shear wave birefringence measurements to the determination of microstructure orientation in transversely isotropic, polycrystalline graphite materials. <i>Carbon</i> , 2017 , 115, 460-470	10.4	2
15	Impregnation of alumina with palladium tetrahalide anionic complexes. <i>Reaction Kinetics and Catalysis Letters</i> , 1991 , 43, 393-398		2
14	Field emission microscopy study of silver adsorption on tungsten single-crystal planes. <i>Thin Solid Films</i> , 1982 , 97, 245-257	2.2	2
13	Note on Graphite Oxidation by Oxygen and Moisture		2
12	Characterization of Porosity Development in Oxidized Graphite using Automated Image Analysis Techniques		2
11	Effect of Air Oxidation on Pore Structure Development and Mechanical Properties of Nuclear Graphite 2010 ,		2
10	Summary of US DOE R&D Activities on Graphite Oxidation (2006-2021) 2021 ,		2

9	Activated carbon fibers for gas storage? 2017 , 305-335		1
8	Experimental Evidence of Super Densification of Adsorbed Hydrogen by in-situ Small Angle Neutron Scattering (SANS). <i>Materials Research Society Symposia Proceedings</i> , 2011 , 1334, 31301		1
7	Effect of microstructure and temperature on nuclear graphite oxidation using the 3D Random Pore Model. <i>Carbon</i> , 2022 , 191, 132-145	10.4	1
6	Probing basal planes and edge sites in polygranular nuclear graphite by gas adsorption: Estimation of active surface area. <i>Carbon</i> , 2021 , 179, 633-645	10.4	1
5	Characterization of the Irradiation Effects in Nuclear Graphite. <i>Minerals, Metals and Materials Series</i> , 2019 , 901-906		0.3
4	Monitoring phase behavior of hydrogen confined in carbon nanopores by in-situ Small Angle Neutron Scattering technique. <i>Materials Research Society Symposia Proceedings</i> , 2012 , 1440, 49		
3	Atomic Resolution Investigation of Metal-Assisted Hydrogen Storage Mechanisms in Activated Carbon Fibers. <i>Microscopy and Microanalysis</i> , 2009 , 15, 1426-1427		0.5
2	In situ high pressure XRD study on hydrogen uptake behavior of Pd-carbon systems. <i>Materials Research Society Symposia Proceedings</i> , 2007 , 1042, 1		
1	Influence of some organic acids on the adsorption of PdX ₂ complexes on alumina. <i>Reaction Kinetics and Catalysis Letters</i> , 1991 , 43, 399-404		