Mykola Seredych

List of Publications by Year
in descending order

122 papers	8,644 citations	38660 50 h-index	45213 90 g-index
123 all docs	123 docs citations	123 times ranked	10052 citing authors

#	Article	IF	Citations
1	Combined Effect of Nitrogenâ€•and Oxygenâ€Containing Functional Groups of Microporous Activated Carbon on its Electrochemical Performance in Supercapacitors. Advanced Functional Materials, 2009, 19, 438-447.	7.8	1,475
2	Surface functional groups of carbons and the effects of their chemical character, density and accessibility to ions on electrochemical performance. Carbon, 2008, 46, 1475-1488.	5.4	774
3	High-Temperature Behavior and Surface Chemistry of Carbide MXenes Studied by Thermal Analysis. Chemistry of Materials, 2019, 31, 3324-3332.	3.2	296
4	Revisiting the chemistry of graphite oxides and its effect on ammonia adsorption. Journal of Materials Chemistry, 2009, 19, 9176.	6.7	235
5	MXene Sorbents for Removal of Urea from Dialysate: A Step toward the Wearable Artificial Kidney. ACS Nano, 2018, 12, 10518-10528.	7.3	174
6	Mechanism of Ammonia Retention on Graphite Oxides:â€‰ Role of Surface Chemistry and Structure. Journal of Physical Chemistry C, 2007, 111, 15596-15604.	1.5	162
7	Textural and chemical factors affecting adsorption capacity of activated carbon in highly efficient desulfurization of diesel fuel. Carbon, 2009, 47, 2491-2500.	5.4	160
8	Metalâ€‘free Nanoporous Carbon as a Catalyst for Electrochemical Reduction of CO₂ to CO and CH₄. ChemSusChem, 2016, 9, 606-616.	3.6	149
9	S-doped micro/mesoporous carbonâ€“graphene composites as efficient supercapacitors in alkaline media. Journal of Materials Chemistry A, 2013, 1, 11717.	5.2	144
10	Effect of surface phosphorus functionalities of activated carbons containing oxygen and nitrogen on electrochemical capacitance. Carbon, 2009, 47, 1576-1584.	5.4	126
11	Role of graphite precursor in the performance of graphite oxides as ammonia adsorbents. Carbon, 2009, 47, 445-456.	5.4	111
12	Removal of dorzolamide from biomedical wastewaters with adsorption onto graphite oxide/poly(acrylic acid) grafted chitosan nanocomposite. Bioresource Technology, 2014, 152, 399-406.	4.8	110
13	Complexity of CO2 adsorption on nanoporous sulfur-doped carbons â€“ Is surface chemistry an important factor?. Carbon, 2014, 74, 207-217.	5.4	109
14	Removal of antibiotics from water using sewage sludge- and waste oil sludge-derived adsorbents. Water Research, 2012, 46, 4081-4090.	5.3	101
15	Enhanced Reactive Adsorption of Hydrogen Sulfide on the Composites of Graphene/Graphite Oxide with Copper (Hydr)oxychlorides. ACS Applied Materials & Interfaces, 2012, 4, 3316-3324.	4.0	94
16	Superior Performance of Copper Based MOF and Aminated Graphite Oxide Composites as CO₂ Adsorbents at Room Temperature. ACS Applied Materials & Interfaces, 2013, 5, 4951-4959.	4.0	93
17	Pyridinic-N groups and ultramicropore nanoreactors enhance CO2 electrochemical reduction on porous carbon catalysts. Applied Catalysis B: Environmental, 2017, 207, 195-206.	10.8	91
18	Graphite Oxides Obtained from Porous Graphite: The Role of Surface Chemistry and Texture in Ammonia Retention at Ambient Conditions. Advanced Functional Materials, 2010, 20, 1670-1679.	7.8	88

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19	Effects of Surface Features on Adsorption of SO₂ on Graphite Oxide/Zr(OH)₄ Composites. Journal of Physical Chemistry C, 2010, 114, 14552-14560.	1.5	87
20	Activated carbon-based gas sensors: effects of surface features on the sensing mechanism. Journal of Materials Chemistry A, 2015, 3, 3821-3831.	5.2	87
21	Reactive adsorption of hydrogen sulfide on graphite oxide/Zr(OH)4 composites. Chemical Engineering Journal, 2011, 166, 1032-1038.	6.6	86
22	Photoactivity of S-doped nanoporous activated carbons: A new perspective for harvesting solar energy on carbon-based semiconductors. Applied Catalysis A: General, 2012, 445-446, 159-165.	2.2	85
23	Removal of ammonia by graphite oxide via its intercalation and reactive adsorption. Carbon, 2007, 45, 2130-2132.	5.4	82
24	Adsorption of Dibenzothiophenes on Nanoporous Carbons: Identification of Specific Adsorption Sites Governing Capacity and Selectivity. Energy & Fuels, 2010, 24, 3352-3360.	2.5	82
25	Evidence for CO2 reactive adsorption on nanoporous S- and N-doped carbon at ambient conditions. Carbon, 2016, 96, 856-863.	5.4	79
26	New copper/GO based material as an efficient oxygen reduction catalyst in an alkaline medium: The role of unique Cu/rGO architecture. Applied Catalysis B: Environmental, 2015, 163, 424-435.	10.8	77
27	Visible-Light-Enhanced Interactions of Hydrogen Sulfide with Composites of Zinc (Oxy)hydroxide with Graphite Oxide and Graphene. Langmuir, 2012, 28, 1337-1346.	1.6	76
28	Role of acid mixtures etching on the surface chemistry and sodium ion storage in Ti₃C₂T_x MXene. Chemical Communications, 2020, 56, 6090-6093.	2.2	76
29	Interactions of 4,6-Dimethyldibenzothiophene with the Surface of Activated Carbons. Langmuir, 2009, 25, 9302-9312.	1.6	74
30	Insight into the mechanism of CO2 adsorption on Cuâ€“BTC and its composites with graphite oxide or aminated graphite oxide. Chemical Engineering Journal, 2014, 239, 399-407.	6.6	71
31	Adsorption of Uremic Toxins Using Ti₃C₂T<i>_{<i>x</i>}</i> MXene for Dialysate Regeneration. ACS Nano, 2020, 14, 11787-11798.	7.3	71
32	Changes in graphite oxide texture and chemistry upon oxidation and reduction and their effect on adsorption of ammonia. Carbon, 2011, 49, 4392-4402.	5.4	70
33	Desulfurization of air at high and low H2S concentrations. Chemical Engineering Journal, 2009, 155, 594-602.	6.6	68
34	Electrochemical Reduction of Oxygen on Hydrophobic Ultramicroporous PolyHIPE Carbon. ACS Catalysis, 2016, 6, 5618-5628.	5.5	67
35	Template-Derived Mesoporous Carbons with Highly Dispersed Transition Metals as Media for the Reactive Adsorption of Dibenzothiophene. Langmuir, 2007, 23, 6033-6041.	1.6	64
36	Role of microporosity and surface chemistry in adsorption of 4,6-dimethyldibenzothiophene on polymer-derived activated carbons. Fuel, 2010, 89, 1499-1507.	3.4	61

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37	Investigation of the enhancing effects of sulfur and/or oxygen functional groups of nanoporous carbons on adsorption of dibenzothiophenes. Carbon, 2011, 49, 1216-1224.	5.4	60
38	Manganese oxide and graphite oxide/MnO2 composites as reactive adsorbents of ammonia at ambient conditions. Microporous and Mesoporous Materials, 2012, 150, 55-63.	2.2	60
39	Active pore space utilization in nanoporous carbon-based supercapacitors: Effects of conductivity and pore accessibility. Journal of Power Sources, 2012, 220, 243-252.	4.0	59
40	Aminated graphite oxides and their composites with copper-based metalâ€“organic framework: in search for efficient media for CO2 sequestration. RSC Advances, 2013, 3, 9932.	1.7	59
41	Adsorption of dibenzothiophenes on activated carbons with copper and iron deposited on their surfaces. Fuel Processing Technology, 2010, 91, 693-701.	3.7	58
42	Effect of confined space reduction of graphite oxide followed by sulfur doping on oxygen reduction reaction in neutral electrolyte. Journal of Materials Chemistry A, 2013, 1, 7059.	5.2	56
43	Photoactivity of gâ€C₃N₄/Sâ€Doped Porous Carbon Composite: Synergistic Effect of Composite Formation. ChemSusChem, 2016, 9, 795-799.	3.6	55
44	Removal of Cationic and Ionic Dyes on Industrialâˆ’Municipal Sludge Based Composite Adsorbents. Industrial & Engineering Chemistry Research, 2007, 46, 1786-1793.	1.8	54
45	Role of phosphorus in carbon matrix in desulfurization of diesel fuel using adsorption process. Fuel, 2012, 92, 318-326.	3.4	54
46	Insight into the Capacitive Performance of Sulfurâ€Doped Nanoporous Carbons Modified by Addition of Graphene Phase. Electroanalysis, 2014, 26, 109-120.	1.5	54
47	Confined space reduced graphite oxide doped with sulfur as metal-free oxygen reduction catalyst. Carbon, 2014, 66, 227-233.	5.4	54
48	Removal of copper on composite sewage sludge/industrial sludge-based adsorbents: The role of surface chemistry. Journal of Colloid and Interface Science, 2006, 302, 379-388.	5.0	53
49	Role of Graphite Oxide (GO) and Polyaniline (PANI) in NO₂ Reduction on GO-PANI Composites. Industrial & Engineering Chemistry Research, 2007, 46, 6925-6935.	1.8	53
50	Enhancement in Dibenzothiophene Reactive Adsorption from Liquid Fuel via Incorporation of Sulfur Heteroatoms into the Nanoporous Carbon Matrix. ChemSusChem, 2011, 4, 139-147.	3.6	53
51	Evaluation of CO2 interactions with S-doped nanoporous carbon and its composites with a reduced GO: Effect of surface features on an apparent physical adsorption mechanism. Carbon, 2016, 98, 250-258.	5.4	51
52	Zinc (hydr)oxide/graphite based-phase composites: effect of the carbonaceous phase on surface properties and enhancement in electrical conductivity. Journal of Materials Chemistry, 2012, 22, 7970.	6.7	50
53	Sulfurâ€Doped Carbon Aerogel as a Metalâ€Free Oxygen Reduction Catalyst. ChemCatChem, 2015, 7, 2924-2931.	1.8	50
54	S-doped carbon aerogels/GO composites as oxygen reduction catalysts. Journal of Energy Chemistry, 2016, 25, 236-245.	7.1	50

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55	Role of Microporosity and Nitrogen Functionality on the Surface of Activated Carbon in the Process of Desulfurization of Digester Gas. Journal of Physical Chemistry C, 2008, 112, 4704-4711.	1.5	48
56	Nitrogen-Doped Activated Carbon-Based Ammonia Sensors: Effect of Specific Surface Functional Groups on Carbon Electronic Properties. ACS Sensors, 2016, 1, 591-599.	4.0	48
57	Visible light driven photoelectrochemical water splitting on metal free nanoporous carbon promoted by chromophoric functional groups. Carbon, 2014, 79, 432-441.	5.4	47
58	Sewage sludge as a single precursor for development of composite adsorbents/catalysts. Chemical Engineering Journal, 2007, 128, 59-67.	6.6	46
59	Enhancement of Ti₃C₂ MXene Pseudocapacitance after Urea Intercalation Studied by Soft X-ray Absorption Spectroscopy. Journal of Physical Chemistry C, 2020, 124, 5079-5086.	1.5	46
60	Specific anion and cation capacitance in porous carbon blacks. Carbon, 2010, 48, 1767-1778.	5.4	45
61	Cobalt (hydr)oxide/graphite oxide composites: Importance of surface chemical heterogeneity for reactive adsorption of hydrogen sulfide. Journal of Colloid and Interface Science, 2012, 378, 1-9.	5.0	45
62	Surface features of exfoliated graphite/bentonite composites and their importance for ammonia adsorption. Carbon, 2008, 46, 1241-1252.	5.4	44
63	Combined Role of Water and Surface Chemistry in Reactive Adsorption of Ammonia on Graphite Oxides. Langmuir, 2010, 26, 5491-5498.	1.6	44
64	Adsorption of ammonia on graphite oxide/aluminium polycation and graphite oxide/zirconiumâ€“aluminium polyoxycation composites. Journal of Colloid and Interface Science, 2008, 324, 25-35.	5.0	43
65	Effect of fly ash addition on the removal of hydrogen sulfide from biogas and air on sewage sludge-based composite adsorbents. Waste Management, 2008, 28, 1983-1992.	3.7	43
66	Reactive adsorption of hydrogen sulfide on visible light photoactive zinc (hydr)oxide/graphite oxide and zinc (hydr)oxychloride/graphite oxide composites. Applied Catalysis B: Environmental, 2013, 132-133, 321-331.	10.8	43
67	Mesoporous Graphitic Carbon Nitrideâ€Based Nanospheres as Visibleâ€Light Active Chemical Warfare Agents Decontaminant. ChemNanoMat, 2016, 2, 268-272.	1.5	42
68	Effect of nanoporous carbon surface chemistry on the removal of endocrine disruptors from water phase. Journal of Colloid and Interface Science, 2015, 449, 180-191.	5.0	40
69	Insight into ammonia sensing on heterogeneous S- and N- co-doped nanoporous carbons. Carbon, 2016, 96, 1014-1021.	5.4	40
70	Municipal waste conversion to hydrogen sulfide adsorbents: Investigation of the synergistic effects of sewage sludge/fish waste mixture. Chemical Engineering Journal, 2014, 237, 88-94.	6.6	39
71	Desulfurization of Digester Gas on Catalytic Carbonaceous Adsorbents:Â Complexity of Interactions between the Surface and Components of the Gaseous Mixture. Industrial & Engineering Chemistry Research, 2006, 45, 3658-3665.	1.8	38
72	Selective Adsorption of Dibenzothiophenes on Activated Carbons with Ag, Co, and Ni Species Deposited on Their Surfaces. Energy & Fuels, 2009, 23, 3737-3744.	2.5	38

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73	Effect of the Incorporation of Nitrogen to a Carbon Matrix on the Selectivity and Capacity for Adsorption of Dibenzothiophenes from Model Diesel Fuel. Langmuir, 2010, 26, 227-233.	1.6	38
74	Evaluation of GO/MnO2 composites as supercapacitors in neutral electrolytes: role of graphite oxide oxidation level. Journal of Materials Chemistry, 2012, 22, 23525.	6.7	37
75	Effect of visible light and electrode wetting on the capacitive performance of S- and N-doped nanoporous carbons: Importance of surface chemistry. Carbon, 2014, 78, 540-558.	5.4	37
76	Desulfurization of Digester Gas on Wood-Based Activated Carbons Modified with Nitrogen: Importance of Surface Chemistry. Energy & Fuels, 2008, 22, 850-859.	2.5	36
77	Adsorption of hydrogen sulfide on graphite derived materials modified by incorporation of nitrogen. Materials Chemistry and Physics, 2009, 113, 946-952.	2.0	36
78	Charge Storage Accessibility Factor as a Parameter Determining the Capacitive Performance of Nanoporous Carbon-Based Supercapacitors. ACS Sustainable Chemistry and Engineering, 2013, 1, 1024-1032.	3.2	36
79	New Cu_xS_y/nanoporous carbon composites as efficient oxygen reduction catalysts in alkaline medium. Journal of Materials Chemistry A, 2014, 2, 20164-20176.	5.2	34
80	Alterations of S-doped porous carbon-rGO composites surface features upon CO2 adsorption at ambient conditions. Carbon, 2016, 107, 501-509.	5.4	33
81	Adsorption of Bovine Serum Albumin on Carbon-Based Materials. Journal of Carbon Research, 2018, 4, 3.	1.4	32
82	Interactions of NO₂ and NO with Carbonaceous Adsorbents Containing Silver Nanoparticles. Langmuir, 2010, 26, 9457-9464.	1.6	29
83	Investigation of the Thermal Regeneration Efficiency of Activated Carbons Used in the Desulfurization of Model Diesel Fuel. Industrial & Engineering Chemistry Research, 2011, 50, 14097-14104.	1.8	29
84	Comparison of melamine resin and melamine network as precursors for carbon electrodes. Carbon, 2015, 81, 239-250.	5.4	29
85	Visible light photoactivity of sulfur and phosphorus doped nanoporous carbons in oxidation of dibenzothiophenes. Fuel, 2013, 108, 846-849.	3.4	28
86	Nitrogen enrichment of S-doped nanoporous carbon by g-C3N4: Insight into photosensitivity enhancement. Carbon, 2016, 107, 895-906.	5.4	28
87	Graphite oxide/AlZr polycation composites: Surface characterization and performance as adsorbents of ammonia. Materials Chemistry and Physics, 2009, 117, 99-106.	2.0	27
88	Nitrogen modified carbide-derived carbons as adsorbents of hydrogen sulfide. Journal of Colloid and Interface Science, 2009, 330, 60-66.	5.0	27
89	Enhanced adsorption of hydrogen sulfide on mixed zinc/cobalt hydroxides: Effect of morphology and an increased number of surface hydroxyl groups. Journal of Colloid and Interface Science, 2013, 405, 218-225.	5.0	27
90	Analysis of factors affecting visible and UV enhanced oxidation of dibenzothiophenes on sulfur-doped activated carbons. Carbon, 2013, 62, 356-364.	5.4	25

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91	Photoluminescence of nanoporous carbons: Opening a new application route for old materials. Carbon, 2014, 77, 651-659.	5.4	25
92	Effects of the addition of graphite oxide to the precursor of a nanoporous carbon on the electrochemical performance of the resulting carbonaceous composites. Carbon, 2012, 50, 4144-4154.	5.4	24
93	Effect of Visibleâ€Light Exposure and Electrolyte Oxygen Content on the Capacitance of Sulfurâ€Doped Carbon. ChemElectroChem, 2014, 1, 565-572.	1.7	24
94	Silicaâˆ'Polyamine-Based Carbon Composite Adsorbents as Media for Effective Hydrogen Sulfide Adsorption/Oxidation. Chemistry of Materials, 2007, 19, 2500-2511.	3.2	23
95	Interactions of NO₂ with Zinc (Hydr)oxide/Graphene Phase Composites: Visible Light Enhanced Surface Reactivity. Journal of Physical Chemistry C, 2012, 116, 2527-2535.	1.5	23
96	Controllable atomistic graphene oxide model and its application in hydrogen sulfide removal. Journal of Chemical Physics, 2013, 139, 194707.	1.2	23
97	Effect of the graphene phase presence in nanoporous S-doped carbon on photoactivity in UV and visible light. Applied Catalysis B: Environmental, 2014, 147, 842-850.	10.8	23
98	Graphene-Based Materials for the Fast Removal of Cytokines from Blood Plasma. ACS Applied Bio Materials, 2018, 1, 436-443.	2.3	22
99	Tobacco Waste/Industrial Sludge Based Desulfurization Adsorbents:Â Effect of Phase Interactions during Pyrolysis on Surface Activity. Environmental Science & Technology, 2007, 41, 3715-3721.	4.6	21
100	Effects of surface chemistry on the reactive adsorption of hydrogen cyanide on activated carbons. Carbon, 2009, 47, 2456-2465.	5.4	20
101	Analysis of the chemical and physical factors affecting reactive adsorption of ammonia on graphene/nanoporous carbon composites. Carbon, 2013, 55, 176-184.	5.4	20
102	Sulfur-mediated photochemical energy harvesting in nanoporous carbons. Carbon, 2016, 104, 253-259.	5.4	20
103	Moisture insensitive adsorption of ammonia on resorcinol-formaldehyde resins. Journal of Hazardous Materials, 2016, 305, 96-104.	6.5	18
104	Structural and optical characterization of Zn(OH)_2and its composites with graphite oxides. Optics Letters, 2013, 38, 962.	1.7	17
105	Delamination of MXenes using bovine serum albumin. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 641, 128580.	2.3	15
106	Desulfurization of Digester Gas on Industrial-Sludge-Derived Adsorbents. Energy & Fuels, 2007, 21, 858-866.	2.5	14
107	Surface properties of porous carbons obtained from polystyrene-based polymers within inorganic templates: role of polymer chemistry and inorganic template pore structure. Microporous and Mesoporous Materials, 2007, 100, 45-54.	2.2	14
108	Adsorption of ammonia on graphite oxide/Al13 composites. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 353, 30-36.	2.3	13

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109	Oxygen reduction on chemically heterogeneous iron-containing nanoporous carbon: The effects of specific surface functionalities. Microporous and Mesoporous Materials, 2016, 221, 137-149.	2.2	13
110	Interactions of Arsine with Nanoporous Carbons: Role of Heteroatoms in the Oxidation Process at Ambient Conditions. Journal of Physical Chemistry C, 2010, 114, 6527-6533.	1.5	12
111	Involvement of water and visible light in the enhancement in SO2 adsorption at ambient conditions on the surface of zinc (hydr)oxide/graphite oxide composites. Chemical Engineering Journal, 2013, 223, 442-453.	6.6	12
112	On the photoactivity of S-doped nanoporous carbons: Importance of surface chemistry and porosity. Chinese Journal of Catalysis, 2014, 35, 807-814.	6.9	10
113	Peculiar Properties of Mesoporous Synthetic Carbon/Graphene Phase Composites and their Effect on Supercapacitive Performance. ChemSusChem, 2015, 8, 1955-1965.	3.6	10
114	Removal of dibenzothiophenes from model diesel fuel on sulfur rich activated carbons. Applied Catalysis B: Environmental, 2011, , .	10.8	9
115	Band gap energies of solar micro/meso-porous composites of zinc (hydr)oxide with graphite oxides. Journal of Applied Physics, 2013, 114, 043522.	1.1	9
116	Carbon phase-graphite oxide composites based on solid state interactions between the components: Importance of surface chemistry and microstructure. Carbon, 2015, 95, 580-588.	5.4	8
117	Preparation of synthetic carbon adsorbents and investigation on porous structure of obtained adsorbents with Î±s method. Materials Chemistry and Physics, 2003, 82, 165-172.	2.0	7
118	Time-resolved photoluminescence of Zn(OH)_2 and its composites with graphite oxides. Optics Letters, 2013, 38, 2227.	1.7	5
119	Hybrid solar cells of micro/mesoporous Zn(OH)2 and its graphite composites sensitized by CdSe quantum dots. Journal of Photonics for Energy, 2014, 4, 043098.	0.8	3
120	Optical properties of porous nano-composites of zinc (hydr)oxide with graphite oxide. , 2013, , .		1
121	Time-resolved fluorescence and ultrafast energy transfer in a zinc (hydr)oxideâ€"graphite oxide mesoporous composite. Journal of Photonics for Energy, 2015, 5, 053084.	0.8	1
122	The effects of fabrication temperature on current-voltage characteristics and energy efficiencies of quantum dot sensitized ZnOH-GO hybrid solar cells. Journal of Applied Physics, 2014, 116, 173102.	1.1	0