Ljubisa R Radovic

List of Publications by Citations

100 papers	6,341 citations	44 h-index	79 g-index
110 ext. papers	6,720 ext. citations	7.9 avg, IF	5.74 L-index

#	Paper	IF	Citations
100	On the chemical nature of graphene edges: origin of stability and potential for magnetism in carbon materials. *Journal of the American Chemical Society*, **2005**, 127, 5917-27	16.4	441
99	Evidence for the protonation of basal plane sites on carbon. *Carbon*, **1992**, 30, 797-811	10.4	426
98	Importance of carbon active sites in the gasification of coal chars. *Fuel*, **1983**, 62, 849-856	7.1	413
97	An experimental and theoretical study of the adsorption of aromatics possessing electron-withdrawing and electron-donating functional groups by chemically modified activated carbons. *Carbon*, **1997**, 35, 1339-1348	10.4	328
96	On the Modification and Characterization of Chemical Surface Properties of Activated Carbon:In the Search of Carbons with Stable Basic Properties. *Langmuir*, **1996**, 12, 4404-4410	4	289
95	Importance of catalyst dispersion in the gasification of lignite chars. *Journal of Catalysis*, **1983**, 82, 382-394	7.3	172
94	NO Reduction by Activated Carbons. 7. Some Mechanistic Aspects of Uncatalyzed and Catalyzed Reaction. *Energy & Fuels*, **1996**, 10, 158-168	4.1	160
93	On the kinetics of carbon (Char) gasification: Reconciling models with experiments. *Carbon*, **1990**, 28, 7-19	10.4	160
92	Active sites in graphene and the mechanism of CO2 formation in carbon oxidation. *Journal of the American Chemical Society*, **2009**, 131, 17166-75	16.4	155
91	Influence of char surface chemistry on the reduction of nitric oxide with chars. *Energy & Fuels*, **1993**, 7, 85-89	4.1	152
90	Inhibition of catalytic oxidation of carbon/carbon composites by phosphorus. *Carbon*, **2006**, 44, 141-151	10.4	142
89	The role of substitutional boron in carbon oxidation. *Carbon*, **1998**, 36, 1841-1854	10.4	139
88	Structural and Textural Properties of Pyrolytic Carbon Formed within a Microporous Zeolite Template. *Chemistry of Materials*, **1998**, 10, 550-558	9.6	125
87	On the difference between the isoelectric point and the point of zero charge of carbons. *Carbon*, **1995**, 33, 1655-1657	10.4	123
86	NO Reduction by Activated Carbons. 2. Catalytic Effect of Potassium. *Energy & Fuels*, **1995**, 9, 97-103	4.1	115
85	Hydrodeoxygenation of guaiacol over carbon-supported molybdenum nitride catalysts: Effects of nitriding methods and support properties. *Applied Catalysis A: General*, **2012**, 439-440, 111-124	5.1	104
84	Oxidation inhibition effects of phosphorus and boron in different carbon fabrics. *Carbon*, **2003**, 41, 1987-1997	10.4	101

83	Effects of acid treatments of carbon on N2O and NO reduction by carbon-supported copper catalysts. *Carbon*, **2000**, 38, 451-464	10.4	99
82	Hydrodeoxygenation of 2-methoxyphenol over Mo2N catalysts supported on activated carbons. *Catalysis Today*, **2011**, 172, 232-239	5.3	96
81	Effect of lignite pyrolysis conditions on calcium oxide dispersion and subsequent char reactivity. *Fuel*, **1983**, 62, 209-212	7.1	95
80	On the Modification and Characterization of Chemical Surface Properties of Activated Carbon: Microcalorimetric, Electrochemical, and Thermal Desorption Probes. *Langmuir*, **1997**, 13, 3414-3421	4	89
79	Gate-voltage control of oxygen diffusion on graphene. *Physical Review Letters*, **2011**, 106, 146802	7.4	88
78	The mechanism of CO2 chemisorption on zigzag carbon active sites: A computational chemistry study. *Carbon*, **2005**, 43, 907-915	10.4	88
77	Further development of Raman Microprobe spectroscopy for characterization of char reactivity. *Proceedings of the Combustion Institute*, **2007**, 31, 1881-1887	5.9	80
76	On the importance of the electrokinetic properties of carbons for their use as catalyst supports. *Carbon*, **1990**, 28, 369-375	10.4	74
75	Combined effects of inorganic constituents and pyrolysis conditions on the gasification reactivity of coal chars. *Fuel Processing Technology*, **1985**, 10, 311-326	7.2	72
74	On the porous structure of coals: Evidence for an interconnected but constricted micropore system and implications for coalbed methane recovery. *Adsorption*, **1997**, 3, 221-232	2.6	71
73	Nanocarbons. *Carbon*, **2002**, 40, 2279-2282	10.4	69
72	Oxygen migration on the graphene surface. 2. Thermochemistry of basal-plane diffusion (hopping). *Carbon*, **2011**, 49, 4226-4238	10.4	67
71	A transient kinetics study of char gasification in carbon dioxide and oxygen. *Energy & Fuels*, **1991**, 5, 68-74	4.1	66
70	NO Reduction by Activated Carbons. 4. Catalysis by Calcium. *Energy & Fuels*, **1995**, 9, 112-118	4.1	64
69	Low-Temperature Generation of Basic Carbon Surfaces by Hydrogen Spillover. *The Journal of Physical Chemistry*, **1996**, 100, 17243-17248		64
68	NO Reduction by Activated Carbons. 5. Catalytic Effect of Iron. *Energy & Fuels*, **1995**, 9, 540-548	4.1	58
67	NO Reduction by Activated Carbons. 3. Influence of Catalyst Loading on the Catalytic Effect of Potassium. *Energy & Fuels*, **1995**, 9, 104-111	4.1	57
66	High surface area graphitized carbon with uniform mesopores synthesised by a colloidal imprinting method. *Chemical Communications*, **2002**, 1346-1347	5.8	55

65	Catalytic coal gasification: use of calcium versus potassium?. *Fuel*, **1984**, 63, 1028-1030	7.1	55
64	Microemulsion-Mediated Synthesis of Nanosize Molybdenum Sulfide Particles. *Journal of Colloid and Interface Science*, **1994**, 163, 120-129	9.3	53
63	Oxygen migration on the graphene surface. 1. Origin of epoxide groups. *Carbon*, **2011**, 49, 4218-4225	10.4	52
62	Ab Initio Molecular Orbital Study on the Electronic Structures and Reactivity of Boron-Substituted Carbon. *Journal of Physical Chemistry A*, **2004**, 108, 9180-9187	2.8	51
61	Ionic strength effects in aqueous phase adsorption of metal ions on activated carbons. *Carbon*, **2003**, 41, 2020-2022	10.4	51
60	Effects of surface and structural properties of carbons on the behavior of carbon-supported molybdenum catalysts. *Journal of Catalysis*, **1991**, 129, 330-342	7.3	46
59	Similarities and differences in O2 chemisorption on graphene nanoribbon vs. carbon nanotube. *Carbon*, **2012**, 50, 1152-1162	10.4	45
58	Inhibition of catalytic oxidation of carbon/carbon composites by boron-doping. *Carbon*, **2005**, 43, 1768-1777	10.4	45
57	Transient kinetics study of catalytic char gasification in carbon dioxide. *Industrial & Engineering Chemistry Research*, **1991**, 30, 1735-1744	3.9	45
56	Catalytic oxidation of carbon/carbon composite materials in the presence of potassium and calcium acetates. *Carbon*, **2005**, 43, 333-344	10.4	43
55	A new kinetic model for the NO□arbon reaction. *Chemical Engineering Science*, **1999**, 54, 4125-4136	4.4	42
54	On the mechanism of nascent site deactivation in graphene. *Carbon*, **2011**, 49, 3471-3487	10.4	41
53	Effect of oxygen chemisorption on char gasification reactivity profiles obtained by thermogravimetric analysis. *Fuel*, **1988**, 67, 1691-1695	7.1	39
52	Potassium-Containing Coal Chars as Catalysts for NOx Reduction in the Presence of Oxygen. *Energy & Fuels*, **1998**, 12, 1256-1264	4.1	38
51	Reactivities of chars obtained as residues in selected coal conversion processes. *Fuel Processing Technology*, **1984**, 8, 149-154	7.2	38
50	On the oxidation resistance of carbon-carbon composites: Importance of fiber structure for composite reactivity. *Carbon*, **1995**, 33, 545-554	10.4	36
49	Gasification reactivity of Chilean coals. *Fuel*, **1986**, 65, 292-294	7.1	36
48	An update on the mechanism of the graphene□NO reaction. *Carbon*, **2015**, 86, 58-68	10.4	32

47	Torrefaction of Pinus radiata and Eucalyptus globulus: A combined experimental and modeling approach to process synthesis. *Energy for Sustainable Development*, **2015**, 29, 13-23	5.4	31
46	Effects of boron doping in low- and high-surface-area carbon powders. *Carbon*, **2004**, 42, 2233-2244	10.4	31
45	Microcalorimetric Study of the Influence of Surface Chemistry on the Adsorption of Water by High Surface Area Carbons. *Journal of Physical Chemistry B*, **2000**, 104, 8170-8176	3.4	31
44	On the gasification reactivity of Italian Sulcis coal. *Fuel*, **1991**, 70, 1027-1030	7.1	31
43	Kinetics of oxygen transfer reactions on the graphene surface: Part I. NO vs. O2. *Carbon*, **2016**, 99, 472-484	10.4	28
42	On the oxidation resistance of carbon-carbon composites obtained by chemical vapor infiltration of different carbon cloths. *Carbon*, **1992**, 30, 365-374	10.4	27
41	Preferential distribution and oxidation inhibiting/catalytic effects of boron in carbon fiber reinforced carbon (CFRC) composites. *Carbon*, **2003**, 41, 2591-2600	10.4	25
40	Impact of Pretreatments on the Selectivity of Carbon for NOx Adsorption/Reduction. *Energy & Fuels*, **1999**, 13, 903-906	4.1	24
39	Computer Design and Analysis of Operation of a Multiple-Effect Evaporator System in the Sugar Industry. *Industrial & Engineering Chemistry Process Design and Development*, **1979**, 18, 318-323		24
38	Catalysis: An old but new challenge for graphene-based materials. *Chinese Journal of Catalysis*, **2014**, 35, 792-797	11.3	23
37	Microcalorimetric study of the absorption of hydrogen by palladium powders and carbon-supported palladium particles. *Langmuir*, **1993**, 9, 984-992	4	23
36	On the structural and reactivity differences between biomass- and coal-derived chars. *Carbon*, **2016**, 109, 253-263	10.4	22
35	Monte Carlo simulation of carbon gasification using molecular orbital theory. *AICHE Journal*, **1996**, 42, 2303-2307	3.6	22
34	Pyrolyzed phthalocyanines as surrogate carbon catalysts: Initial insights into oxygen-transfer mechanisms. *Fuel*, **2012**, 99, 106-117	7.1	21
33	Thermodynamic predictions of performance of a bagasse integrated gasification combined cycle under quasi-equilibrium conditions. *Chemical Engineering Journal*, **2014**, 258, 402-411	14.7	20
32	Structural importance of Stone□Thrower□Wales defects in rolled and flat graphenes from surface-enhanced Raman scattering. *Carbon*, **2012**, 50, 3274-3279	10.4	20
31	Simulation of carbon gasification kinetics using an edge recession model. *AICHE Journal*, **1993**, 39, 1178-1185	3.6	20
30	Sulfur tolerance of methanol synthesis catalysts: Modelling of catalyst deactivation. *Applied Catalysis*, **1987**, 29, 1-20		20

29	Physicochemical characterization of carbon-coated alumina. *Journal of Colloid and Interface Science*, **1992**, 148, 1-13	9.3	19
28	Graphene functionalization: Mechanism of carboxyl group formation. *Carbon*, **2018**, 130, 340-349	10.4	18
27	Effects of the substrate on deposit structure and reactivity in the chemical vapor deposition of carbon. *Carbon*, **1998**, 36, 1623-1632	10.4	16
26	Preparation and characterization of inexpensive heterogeneous catalysts for air pollution control: Two case studies. *Catalysis Today*, **2007**, 123, 208-217	5.3	15
25	On the oxidation resistance of C/C composites obtained by liquid-phase impregnation/ carbonization of different carbon cloths. *Carbon*, **1993**, 31, 789-799	10.4	13
24	Hydrogen transfer and quinone/hydroquinone transitions in graphene-based materials. *Carbon*, **2018**, 126, 443-451	10.4	12
23	On the adsorption affinity coefficient of carbon dioxide in microporous carbons. *Carbon*, **2004**, 42, 1867-1871	10.4	12
22	On the potassium-catalysed gasification of a Chilean bituminous coal. *Fuel*, **1990**, 69, 789-791	7.1	10
21	Importance of carbon active sites in coal char gasification 8 years later. *Carbon*, **1991**, 29, 809-811	10.4	9
20	Use of transient kinetics and temperature-programmed desorption to predict carbon/char reactivity: the case of copper-catalyzed gasification of coal char in oxygen. *Energy & Fuels*, **1992**, 6, 865-867	4.1	9
19	On the methane adsorption capacity of activated carbons: in search of a correlation with adsorbent properties. *Journal of Chemical Technology and Biotechnology*, **2009**, 84, 1736-1741	3.5	8
18	Physicochemical Properties of Carbon Materials: A Brief Overview **2008**, 1-44		8
17	Energetics of Physical Adsorption of Gases and Vapors on Carbons **2004**, 209-223		8
16	The role of calcium in high pH excursions for reactivated GAC. *Carbon*, **2005**, 43, 511-518	10.4	7
15	On the active sites for the oxygen reduction reaction catalyzed by graphene-based materials. *Carbon*, **2020**, 156, 389-398	10.4	7
14	On Tailoring the Surface Chemistry of Activated Carbons for Their Use in Purification of Aqueous Effluents. *Kluwer International Series in Engineering and Computer Science*, **1996**, 749-756		7
13	Comparative study of maleated polypropylene as a coupling agent for recycled low-density polyethylene/wood flour composites. *Journal of Applied Polymer Science*, **2011**, 122, 1731-1741	2.9	6
12	Kinetics of oxygen transfer reactions on the graphene surface. Part II. H2O vs. CO2. *Carbon*, **2020**, 164, 85-99	10.4	5

List of Publications

11	Diamond Synthesized at Low Pressure **2004**, 71-207		4
10	Spin density distributions on graphene clusters and ribbons with carbene-like active sites. *Physical Chemistry Chemical Physics*, **2018**, 20, 26968-26978	3.6	4
9	A commentary on "Effect of metal additives on the physicochemical characteristics of activated carbon exemplified by benzene and acetic acid adsorption". *Carbon*, **2001**, 39, 951-953	10.4	3
8	No reduction by activated carbons. some mechanistic aspects of uncatalyzed and catalyzed reaction. *Coal Science and Technology*, **1995**, 24, 1799-1802		3
7	Probing the "elephant": On the essential difference between graphenes and polycyclic aromatic hydrocarbons. *Carbon*, **2021**, 171, 798-805	10.4	3
6	IRC data for a mechanistic route starting with HO adsorption and finishing with H desorption from graphene. *Data in Brief*, **2020**, 30, 105362	1.2	2
5	New insights into oxygen surface coverage and the resulting two-component structure of graphene oxide. *Carbon*, **2020**, 158, 406-417	10.4	2
4	Inhibition Effect of Coexisting Gas on CO2 Gasification of Ca-Loaded Coal Char.. *Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy*, **1994**, 73, 1005-1012	0.5	1
3	Science and Mexico are the losers in institute politics. *Nature*, **2010**, 464, 160	50.4	
2	Enhancement of micropore filling of water on carbon black by platinum loading. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2010**, 173, 113-116	3.1	
1	Catalysis in Coal and Carbon Gasification **2008**, 3037		