

# Ljubisa R Radovic

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/8629621/ljubisa-r-radovic-publications-by-year.pdf>  
**Version:** 2024-04-04

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.

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	Probing the Elephant in the Room: On the essential difference between graphenes and polycyclic aromatic hydrocarbons. <i>Carbon</i> , <b>2021</b> , 171, 798-805	10.4	3
99	IRC data for a mechanistic route starting with HO adsorption and finishing with H desorption from graphene. <i>Data in Brief</i> , <b>2020</b> , 30, 105362	1.2	2
98	Kinetics of oxygen transfer reactions on the graphene surface. Part II. H <sub>2</sub> O vs. CO <sub>2</sub> . <i>Carbon</i> , <b>2020</b> , 164, 85-99	10.4	5
97	New insights into oxygen surface coverage and the resulting two-component structure of graphene oxide. <i>Carbon</i> , <b>2020</b> , 158, 406-417	10.4	2
96	On the active sites for the oxygen reduction reaction catalyzed by graphene-based materials. <i>Carbon</i> , <b>2020</b> , 156, 389-398	10.4	7
95	Graphene functionalization: Mechanism of carboxyl group formation. <i>Carbon</i> , <b>2018</b> , 130, 340-349	10.4	18
94	Hydrogen transfer and quinone/hydroquinone transitions in graphene-based materials. <i>Carbon</i> , <b>2018</b> , 126, 443-451	10.4	12
93	Spin density distributions on graphene clusters and ribbons with carbene-like active sites. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 26968-26978	3.6	4
92	On the structural and reactivity differences between biomass- and coal-derived chars. <i>Carbon</i> , <b>2016</b> , 109, 253-263	10.4	22
91	Kinetics of oxygen transfer reactions on the graphene surface: Part I. NO vs. O <sub>2</sub> . <i>Carbon</i> , <b>2016</b> , 99, 472-484	10.4	28
90	Torrefaction of <i>Pinus radiata</i> and <i>Eucalyptus globulus</i> : A combined experimental and modeling approach to process synthesis. <i>Energy for Sustainable Development</i> , <b>2015</b> , 29, 13-23	5.4	31
89	An update on the mechanism of the graphene-NO reaction. <i>Carbon</i> , <b>2015</b> , 86, 58-68	10.4	32
88	Thermodynamic predictions of performance of a bagasse integrated gasification combined cycle under quasi-equilibrium conditions. <i>Chemical Engineering Journal</i> , <b>2014</b> , 258, 402-411	14.7	20
87	Catalysis: An old but new challenge for graphene-based materials. <i>Chinese Journal of Catalysis</i> , <b>2014</b> , 35, 792-797	11.3	23
86	Hydrodeoxygenation of guaiacol over carbon-supported molybdenum nitride catalysts: Effects of nitriding methods and support properties. <i>Applied Catalysis A: General</i> , <b>2012</b> , 439-440, 111-124	5.1	104
85	Pyrolyzed phthalocyanines as surrogate carbon catalysts: Initial insights into oxygen-transfer mechanisms. <i>Fuel</i> , <b>2012</b> , 99, 106-117	7.1	21
84	Similarities and differences in O <sub>2</sub> chemisorption on graphene nanoribbon vs. carbon nanotube. <i>Carbon</i> , <b>2012</b> , 50, 1152-1162	10.4	45

83	Structural importance of Stone–Wales defects in rolled and flat graphenes from surface-enhanced Raman scattering. <i>Carbon</i> , <b>2012</b> , 50, 3274-3279	10.4	20
82	Gate-voltage control of oxygen diffusion on graphene. <i>Physical Review Letters</i> , <b>2011</b> , 106, 146802	7.4	88
81	Hydrodeoxygenation of 2-methoxyphenol over Mo2N catalysts supported on activated carbons. <i>Catalysis Today</i> , <b>2011</b> , 172, 232-239	5.3	96
80	Comparative study of maleated polypropylene as a coupling agent for recycled low-density polyethylene/wood flour composites. <i>Journal of Applied Polymer Science</i> , <b>2011</b> , 122, 1731-1741	2.9	6
79	On the mechanism of nascent site deactivation in graphene. <i>Carbon</i> , <b>2011</b> , 49, 3471-3487	10.4	41
78	Oxygen migration on the graphene surface. 2. Thermochemistry of basal-plane diffusion (hopping). <i>Carbon</i> , <b>2011</b> , 49, 4226-4238	10.4	67
77	Oxygen migration on the graphene surface. 1. Origin of epoxide groups. <i>Carbon</i> , <b>2011</b> , 49, 4218-4225	10.4	52
76	Science and Mexico are the losers in institute politics. <i>Nature</i> , <b>2010</b> , 464, 160	50.4	
75	Enhancement of micropore filling of water on carbon black by platinum loading. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2010</b> , 173, 113-116	3.1	
74	On the methane adsorption capacity of activated carbons: in search of a correlation with adsorbent properties. <i>Journal of Chemical Technology and Biotechnology</i> , <b>2009</b> , 84, 1736-1741	3.5	8
73	Active sites in graphene and the mechanism of CO2 formation in carbon oxidation. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 17166-75	16.4	155
72	Physicochemical Properties of Carbon Materials: A Brief Overview <b>2008</b> , 1-44		8
71	Catalysis in Coal and Carbon Gasification <b>2008</b> , 3037		
70	Preparation and characterization of inexpensive heterogeneous catalysts for air pollution control: Two case studies. <i>Catalysis Today</i> , <b>2007</b> , 123, 208-217	5.3	15
69	Further development of Raman Microprobe spectroscopy for characterization of char reactivity. <i>Proceedings of the Combustion Institute</i> , <b>2007</b> , 31, 1881-1887	5.9	80
68	Inhibition of catalytic oxidation of carbon/carbon composites by phosphorus. <i>Carbon</i> , <b>2006</b> , 44, 141-151	10.4	142
67	On the chemical nature of graphene edges: origin of stability and potential for magnetism in carbon materials. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 5917-27	16.4	441
66	Catalytic oxidation of carbon/carbon composite materials in the presence of potassium and calcium acetates. <i>Carbon</i> , <b>2005</b> , 43, 333-344	10.4	43

65	The role of calcium in high pH excursions for reactivated GAC. <i>Carbon</i> , <b>2005</b> , 43, 511-518	10.4	7
64	The mechanism of CO <sub>2</sub> chemisorption on zigzag carbon active sites: A computational chemistry study. <i>Carbon</i> , <b>2005</b> , 43, 907-915	10.4	88
63	Inhibition of catalytic oxidation of carbon/carbon composites by boron-doping. <i>Carbon</i> , <b>2005</b> , 43, 1768-1774	10.4	45
62	On the adsorption affinity coefficient of carbon dioxide in microporous carbons. <i>Carbon</i> , <b>2004</b> , 42, 1867-1871	10.4	12
61	Effects of boron doping in low- and high-surface-area carbon powders. <i>Carbon</i> , <b>2004</b> , 42, 2233-2244	10.4	31
60	Ab Initio Molecular Orbital Study on the Electronic Structures and Reactivity of Boron-Substituted Carbon. <i>Journal of Physical Chemistry A</i> , <b>2004</b> , 108, 9180-9187	2.8	51
59	Diamond Synthesized at Low Pressure <b>2004</b> , 71-207		4
58	Energetics of Physical Adsorption of Gases and Vapors on Carbons <b>2004</b> , 209-223		8
57	Ionic strength effects in aqueous phase adsorption of metal ions on activated carbons. <i>Carbon</i> , <b>2003</b> , 41, 2020-2022	10.4	51
56	Oxidation inhibition effects of phosphorus and boron in different carbon fabrics. <i>Carbon</i> , <b>2003</b> , 41, 1987-1997	10.4	101
55	Preferential distribution and oxidation inhibiting/catalytic effects of boron in carbon fiber reinforced carbon (CFRC) composites. <i>Carbon</i> , <b>2003</b> , 41, 2591-2600	10.4	25
54	Nanocarbons. <i>Carbon</i> , <b>2002</b> , 40, 2279-2282	10.4	69
53	High surface area graphitized carbon with uniform mesopores synthesised by a colloidal imprinting method. <i>Chemical Communications</i> , <b>2002</b> , 1346-1347	5.8	55
52	A commentary on Effect of metal additives on the physicochemical characteristics of activated carbon exemplified by benzene and acetic acid adsorption□ <i>Carbon</i> , <b>2001</b> , 39, 951-953	10.4	3
51	Effects of acid treatments of carbon on N <sub>2</sub> O and NO reduction by carbon-supported copper catalysts. <i>Carbon</i> , <b>2000</b> , 38, 451-464	10.4	99
50	Microcalorimetric Study of the Influence of Surface Chemistry on the Adsorption of Water by High Surface Area Carbons. <i>Journal of Physical Chemistry B</i> , <b>2000</b> , 104, 8170-8176	3.4	31
49	A new kinetic model for the NO-carbon reaction. <i>Chemical Engineering Science</i> , <b>1999</b> , 54, 4125-4136	4.4	42
48	Impact of Pretreatments on the Selectivity of Carbon for NO <sub>x</sub> Adsorption/Reduction. <i>Energy &amp; Fuels</i> , <b>1999</b> , 13, 903-906	4.1	24

47	Effects of the substrate on deposit structure and reactivity in the chemical vapor deposition of carbon. <i>Carbon</i> , <b>1998</b> , 36, 1623-1632	10.4	16
46	The role of substitutional boron in carbon oxidation. <i>Carbon</i> , <b>1998</b> , 36, 1841-1854	10.4	139
45	Structural and Textural Properties of Pyrolytic Carbon Formed within a Microporous Zeolite Template. <i>Chemistry of Materials</i> , <b>1998</b> , 10, 550-558	9.6	125
44	Potassium-Containing Coal Chars as Catalysts for NO <sub>x</sub> Reduction in the Presence of Oxygen. <i>Energy &amp; Fuels</i> , <b>1998</b> , 12, 1256-1264	4.1	38
43	On the Modification and Characterization of Chemical Surface Properties of Activated Carbon: Microcalorimetric, Electrochemical, and Thermal Desorption Probes. <i>Langmuir</i> , <b>1997</b> , 13, 3414-3421	4	89
42	On the porous structure of coals: Evidence for an interconnected but constricted micropore system and implications for coalbed methane recovery. <i>Adsorption</i> , <b>1997</b> , 3, 221-232	2.6	71
41	An experimental and theoretical study of the adsorption of aromatics possessing electron-withdrawing and electron-donating functional groups by chemically modified activated carbons. <i>Carbon</i> , <b>1997</b> , 35, 1339-1348	10.4	328
40	Low-Temperature Generation of Basic Carbon Surfaces by Hydrogen Spillover. <i>The Journal of Physical Chemistry</i> , <b>1996</b> , 100, 17243-17248		64
39	NO Reduction by Activated Carbons. 7. Some Mechanistic Aspects of Uncatalyzed and Catalyzed Reaction. <i>Energy &amp; Fuels</i> , <b>1996</b> , 10, 158-168	4.1	160
38	On the Modification and Characterization of Chemical Surface Properties of Activated Carbon: In the Search of Carbons with Stable Basic Properties. <i>Langmuir</i> , <b>1996</b> , 12, 4404-4410	4	289
37	Monte Carlo simulation of carbon gasification using molecular orbital theory. <i>AIChE Journal</i> , <b>1996</b> , 42, 2303-2307	3.6	22
36	On Tailoring the Surface Chemistry of Activated Carbons for Their Use in Purification of Aqueous Effluents. <i>Kluwer International Series in Engineering and Computer Science</i> , <b>1996</b> , 749-756		7
35	NO Reduction by Activated Carbons. 5. Catalytic Effect of Iron. <i>Energy &amp; Fuels</i> , <b>1995</b> , 9, 540-548	4.1	58
34	NO Reduction by Activated Carbons. 4. Catalysis by Calcium. <i>Energy &amp; Fuels</i> , <b>1995</b> , 9, 112-118	4.1	64
33	NO Reduction by Activated Carbons. 3. Influence of Catalyst Loading on the Catalytic Effect of Potassium. <i>Energy &amp; Fuels</i> , <b>1995</b> , 9, 104-111	4.1	57
32	NO Reduction by Activated Carbons. 2. Catalytic Effect of Potassium. <i>Energy &amp; Fuels</i> , <b>1995</b> , 9, 97-103	4.1	115
31	No reduction by activated carbons. some mechanistic aspects of uncatalyzed and catalyzed reaction. <i>Coal Science and Technology</i> , <b>1995</b> , 24, 1799-1802		3
30	On the oxidation resistance of carbon-carbon composites: Importance of fiber structure for composite reactivity. <i>Carbon</i> , <b>1995</b> , 33, 545-554	10.4	36

29	On the difference between the isoelectric point and the point of zero charge of carbons. <i>Carbon</i> , <b>1995</b> , 33, 1655-1657	10.4	123
28	Microemulsion-Mediated Synthesis of Nanosize Molybdenum Sulfide Particles. <i>Journal of Colloid and Interface Science</i> , <b>1994</b> , 163, 120-129	9.3	53
27	Inhibition Effect of Coexisting Gas on CO <sub>2</sub> Gasification of Ca-Loaded Coal Char.. <i>Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy</i> , <b>1994</b> , 73, 1005-1012	0.5	1
26	Microcalorimetric study of the absorption of hydrogen by palladium powders and carbon-supported palladium particles. <i>Langmuir</i> , <b>1993</b> , 9, 984-992	4	23
25	Influence of char surface chemistry on the reduction of nitric oxide with chars. <i>Energy &amp; Fuels</i> , <b>1993</b> , 7, 85-89	4.1	152
24	On the oxidation resistance of C/C composites obtained by liquid-phase impregnation/ carbonization of different carbon cloths. <i>Carbon</i> , <b>1993</b> , 31, 789-799	10.4	13
23	Simulation of carbon gasification kinetics using an edge recession model. <i>AIChE Journal</i> , <b>1993</b> , 39, 1178-1185	3.185	20
22	Use of transient kinetics and temperature-programmed desorption to predict carbon/char reactivity: the case of copper-catalyzed gasification of coal char in oxygen. <i>Energy &amp; Fuels</i> , <b>1992</b> , 6, 865-867	4.1	9
21	Physicochemical characterization of carbon-coated alumina. <i>Journal of Colloid and Interface Science</i> , <b>1992</b> , 148, 1-13	9.3	19
20	On the oxidation resistance of carbon-carbon composites obtained by chemical vapor infiltration of different carbon cloths. <i>Carbon</i> , <b>1992</b> , 30, 365-374	10.4	27
19	Evidence for the protonation of basal plane sites on carbon. <i>Carbon</i> , <b>1992</b> , 30, 797-811	10.4	426
18	Effects of surface and structural properties of carbons on the behavior of carbon-supported molybdenum catalysts. <i>Journal of Catalysis</i> , <b>1991</b> , 129, 330-342	7.3	46
17	Importance of carbon active sites in coal char gasification 8 years later. <i>Carbon</i> , <b>1991</b> , 29, 809-811	10.4	9
16	On the gasification reactivity of Italian Sulcis coal. <i>Fuel</i> , <b>1991</b> , 70, 1027-1030	7.1	31
15	A transient kinetics study of char gasification in carbon dioxide and oxygen. <i>Energy &amp; Fuels</i> , <b>1991</b> , 5, 68-74	4.1	66
14	Transient kinetics study of catalytic char gasification in carbon dioxide. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>1991</b> , 30, 1735-1744	3.9	45
13	On the importance of the electrokinetic properties of carbons for their use as catalyst supports. <i>Carbon</i> , <b>1990</b> , 28, 369-375	10.4	74
12	On the kinetics of carbon (Char) gasification: Reconciling models with experiments. <i>Carbon</i> , <b>1990</b> , 28, 7-19	10.4	160

11	On the potassium-catalysed gasification of a Chilean bituminous coal. <i>Fuel</i> , <b>1990</b> , 69, 789-791	7.1	10
10	Effect of oxygen chemisorption on char gasification reactivity profiles obtained by thermogravimetric analysis. <i>Fuel</i> , <b>1988</b> , 67, 1691-1695	7.1	39
9	Sulfur tolerance of methanol synthesis catalysts: Modelling of catalyst deactivation. <i>Applied Catalysis</i> , <b>1987</b> , 29, 1-20		20
8	Gasification reactivity of Chilean coals. <i>Fuel</i> , <b>1986</b> , 65, 292-294	7.1	36
7	Combined effects of inorganic constituents and pyrolysis conditions on the gasification reactivity of coal chars. <i>Fuel Processing Technology</i> , <b>1985</b> , 10, 311-326	7.2	72
6	Reactivities of chars obtained as residues in selected coal conversion processes. <i>Fuel Processing Technology</i> , <b>1984</b> , 8, 149-154	7.2	38
5	Catalytic coal gasification: use of calcium versus potassium?. <i>Fuel</i> , <b>1984</b> , 63, 1028-1030	7.1	55
4	Importance of carbon active sites in the gasification of coal chars. <i>Fuel</i> , <b>1983</b> , 62, 849-856	7.1	413
3	Effect of lignite pyrolysis conditions on calcium oxide dispersion and subsequent char reactivity. <i>Fuel</i> , <b>1983</b> , 62, 209-212	7.1	95
2	Importance of catalyst dispersion in the gasification of lignite chars. <i>Journal of Catalysis</i> , <b>1983</b> , 82, 382-394	7.1	172
1	Computer Design and Analysis of Operation of a Multiple-Effect Evaporator System in the Sugar Industry. <i>Industrial &amp; Engineering Chemistry Process Design and Development</i> , <b>1979</b> , 18, 318-323		24