

# Konrad Szacilowski

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/3160051/konrad-szacilowski-publications-by-year.pdf>

**Version:** 2024-04-27

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.

135  
papers

3,543  
citations

28  
h-index

57  
g-index

151  
ext. papers

3,892  
ext. citations

7.1  
avg. IF

5.85  
L-index

#	Paper	IF	Citations
135	In Situ Regeneration of Copper-Coated Gas Diffusion Electrodes for Electroreduction of CO to Ethylene. <i>Materials</i> , <b>2021</b> , 14,	3.5	1
134	Spectral properties of polycrystalline MoS <sub>2</sub> films grown by RF magnetron sputtering. <i>Journal of Applied Physics</i> , <b>2021</b> , 130, 224302	2.5	0
133	Towards synthetic neural networks: can artificial electrochemical neurons be coupled with artificial memristive synapses?. <i>Japanese Journal of Applied Physics</i> , <b>2020</b> , 59, SI0801	1.4	5
132	Enhanced ion binding by the benzocrown receptor and a carbonyl of the aminonaphthalimide fluorophore in water-soluble logic gates. <i>Organic and Biomolecular Chemistry</i> , <b>2020</b> , 18, 4773-4782	3.9	5
131	Brief Insights into Cu <sub>2</sub> O Electrodeposition: Detailed Progressive Voltammetric and Electrogravimetric Analysis of a Copper Lactate System. <i>Journal of the Electrochemical Society</i> , <b>2020</b> , 167, 042504	3.9	1
130	Light intensity-induced photocurrent switching effect. <i>Nature Communications</i> , <b>2020</b> , 11, 854	17.4	9
129	Halogen-containing semiconductors: From artificial photosynthesis to unconventional computing. <i>Coordination Chemistry Reviews</i> , <b>2020</b> , 415, 213316	23.2	9
128	In-materioneuromimetic devices: dynamics, information processing and pattern recognition. <i>Japanese Journal of Applied Physics</i> , <b>2020</b> , 59, 050504	1.4	5
127	On Buildings that Compute. A Proposal. <i>Emergence, Complexity and Computation</i> , <b>2020</b> , 311-335	0.1	
126	Neuromorphic Applications of a Multivalued [SnI <sub>4</sub> {(C <sub>6</sub> H <sub>5</sub> ) <sub>2</sub> SO} <sub>2</sub> ] Memristor Incorporated in the Echo State Machine. <i>ACS Applied Electronic Materials</i> , <b>2020</b> , 2, 329-338	4	11
125	Liquid metal droplet solves maze. <i>Soft Matter</i> , <b>2020</b> , 16, 1455-1462	3.6	11
124	On the influence of magnetic field on electrodeposition of Ni <sup>III</sup> /NiO <sub>2</sub> composites from a citrate baths. <i>Materials Chemistry and Physics</i> , <b>2020</b> , 255, 123550	4.4	2
123	Synthesis and spectroscopic studies of diaza-8-crown-4-dinitrophenyl ethers. <i>Supramolecular Chemistry</i> , <b>2020</b> , 32, 13-22	1.8	
122	Bismuth triiodide complexes: structure, spectroscopy, electronic properties, and memristive properties. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 6136-6148	7.1	4
121	Synaptic plasticity, metaplasticity and memory effects in hybrid organic-inorganic bismuth-based materials. <i>Nanoscale</i> , <b>2019</b> , 11, 1080-1090	7.7	25
120	Memristor in a Reservoir System-Experimental Evidence for High-Level Computing and Neuromorphic Behavior of Pbl. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 17009-17018	9.5	12
119	Influence of pulse frequency on physicochemical properties of InSb films obtained via electrodeposition. <i>Electrochimica Acta</i> , <b>2019</b> , 304, 396-404	6.7	9

118	Hardware Realization of the Pattern Recognition with an Artificial Neuromorphic Device Exhibiting a Short-Term Memory. <i>Molecules</i> , <b>2019</b> , 24,	4.8	6
117	Supramolecular Complexes of Graphene Oxide with Porphyrins: An Interplay between Electronic and Magnetic Properties. <i>Molecules</i> , <b>2019</b> , 24,	4.8	16
116	Fluorimetric naphthalimide-based polymer logic beads responsive to acidity and oxidisability. <i>Journal of Materials Chemistry C</i> , <b>2019</b> , 7, 15225-15232	7.1	15
115	Molecular engineering of logic gate types by module rearrangement in 'Pourbaix Sensors': the effect of excited-state electric fields. <i>Organic and Biomolecular Chemistry</i> , <b>2018</b> , 16, 6195-6201	3.9	19
114	Molecules, semiconductors, light and information: Towards future sensing and computing paradigms. <i>Coordination Chemistry Reviews</i> , <b>2018</b> , 365, 23-40	23.2	21
113	Triiodide Organic Salts: Photoelectrochemistry at the Border between Insulators and Semiconductors. <i>ChemElectroChem</i> , <b>2018</b> , 5, 3486-3497	4.3	6
112	Spectroelectrochemical analysis of TiO <sub>2</sub> electronic states [Implications for the photocatalytic activity of anatase and rutile. <i>Catalysis Today</i> , <b>2018</b> , 309, 35-42	5.3	28
111	Heavy pnictogen chalcogenides: the synthesis, structure and properties of these rediscovered semiconductors. <i>Chemical Communications</i> , <b>2018</b> , 54, 12133-12162	5.8	17
110	Charge transfer tuning in TiO <sub>2</sub> hybrid nanostructures with acceptor-acceptor systems. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 2415-2424	7.1	3
109	Organotitania-Based Nanostructures as a Suitable Platform for the Implementation of Binary, Ternary, and Fuzzy Logic Systems. <i>ChemPhysChem</i> , <b>2017</b> , 18, 1798-1810	3.2	10
108	Water-Soluble Colorimetric Amino[(ethanesulfonate)] Azobenzene pH Indicators: A UV-Vis Absorption, DFT, and H-N NMR Spectroscopy Study. <i>ACS Omega</i> , <b>2017</b> , 2, 6159-6166	3.9	7
107	Electrochemical Synthesis of Nanocrystalline Ni-Pd Alloys in Alkaline Ni <sup>2+</sup> /Pd <sup>2+</sup> /Cl <sup>-</sup> /NH <sub>3</sub> /H <sub>2</sub> O System and Their Catalytic Activity towards Water Splitting Process. <i>Journal of the Electrochemical Society</i> , <b>2017</b> , 164, D613-D620	3.9	3
106	Unconventional Computing Realized with Hybrid Materials Exhibiting the PhotoElectrochemical Photocurrent Switching (PEPS) Effect. <i>Emergence, Complexity and Computation</i> , <b>2017</b> , 429-467	0.1	3
105	Influence of Hydrogen Bonding Interactions on Electronic Properties of Tin(IV) Iodide Semiconducting Complexes. <i>Inorganic Chemistry</i> , <b>2016</b> , 55, 5935-45	5.1	13
104	Electrochemically deposited nanocrystalline InSb thin films and their electrical properties. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 1345-1350	7.1	17
103	Synaptic Behavior in an Optoelectronic Device Based on Semiconductor-Nanotube Hybrid. <i>Advanced Electronic Materials</i> , <b>2016</b> , 2, 1500471	6.4	32
102	Interactions between graphene oxide and wide band gap semiconductors. <i>Journal of Physics: Conference Series</i> , <b>2016</b> , 745, 032102	0.3	4
101	Coordination chemistry for information acquisition and processing. <i>Coordination Chemistry Reviews</i> , <b>2016</b> , 325, 135-160	23.2	21

100	Colorimetric Naphthalene-Based Thiosemicarbazide Anion Chemosensors with an Internal Charge Transfer Mechanism. <i>European Journal of Organic Chemistry</i> , <b>2016</b> , 2016, 4415-4422	3.2	8
99	Photoelectrochemistry of n-type antimony sulfoiodide nanowires. <i>Nanotechnology</i> , <b>2015</b> , 26, 105710	3.4	22
98	Tuning of electronic properties of fullerene-oligothiophene layers. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 041602	3.4	3
97	Lead molybdate a promising material for optoelectronics and photocatalysis. <i>Journal of Materials Chemistry C</i> , <b>2015</b> , 3, 2614-2623	7.1	21
96	TiO <sub>2</sub> /anthraquinone hybrids: from quantum-chemical design to functional materials. <i>Journal of Materials Chemistry C</i> , <b>2015</b> , 3, 4148-4155	7.1	7
95	UV-visible and (1)H-(15)N NMR spectroscopic studies of colorimetric thiosemicarbazide anion sensors. <i>Organic and Biomolecular Chemistry</i> , <b>2015</b> , 13, 1662-72	3.9	25
94	A three-valued photoelectrochemical logic device realising accept anything and consensus operations. <i>Chemical Communications</i> , <b>2015</b> , 51, 3559-61	5.8	23
93	Kinetics and Mechanism of Redox Reaction between Tetrachloroaurate(III) Ions and Hydrazine. <i>International Journal of Chemical Kinetics</i> , <b>2014</b> , 46, 328-337	1.4	10
92	Ground and excited state properties of alizarin and its isomers. <i>Dyes and Pigments</i> , <b>2014</b> , 103, 202-213	4.6	32
91	Photocatalytic Activity of TiO <sub>2</sub> Modified with Hexafluorometallates Fine Tuning of Redox Properties by Redox-Innocent Anions. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 24915-24924	3.8	11
90	Bi(x)La(1-x)VO <sub>4</sub> solid solutions: tuning of electronic properties via stoichiometry modifications. <i>Nanoscale</i> , <b>2014</b> , 6, 2244-54	7.7	18
89	Supramolecular assemblies of semiconductor quantum dots and a bis(bipyridinium) derivative: luminescence quenching and aggregation phenomena. <i>RSC Advances</i> , <b>2014</b> , 4, 29847-29854	3.7	3
88	Synthesis and properties of ZnTe and ZnTe/ZnS core/shell semiconductor nanocrystals. <i>Journal of Materials Chemistry C</i> , <b>2014</b> , 2, 2877-2886	7.1	31
87	Optical signal demultiplexing and conversion in the fullerene/oligothiophene/CdS system. <i>Applied Surface Science</i> , <b>2014</b> , 319, 285-290	6.7	7
86	Acoustic wave sensing devices and their LTCC packaging <b>2014</b> ,		2
85	Redox characterization of semiconductors based on electrochemical measurements combined with UV-Vis diffuse reflectance spectroscopy. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 14256-61	3.6	31
84	Alizarin complexone: an interesting ligand for designing TiO <sub>2</sub> -hybrid nanostructures. <i>New Journal of Chemistry</i> , <b>2013</b> , 37, 969	3.6	8
83	Photoelectrochemistry of n-type bismuth oxyiodide. <i>Electrochimica Acta</i> , <b>2013</b> , 104, 448-453	6.7	49

82	Hybrid Semiconducting Materials: New Perspectives for Molecular-Scale Information Processing <b>2013</b> , 121-173		0
81	Photoluminescence Enhancement of CdSe and CdSe/ZnS Nanocrystals by On-Surface Ligand Modification. <i>European Journal of Inorganic Chemistry</i> , <b>2013</b> , 2013, 3550-3556	2.3	7
80	Novel, Microwave Assisted Route of Synthesis of Binary Oxide Semiconducting Phases [PbMoO4 And PbWO4 / Nowa Metoda Syntezy Binarnych Faz Tlenkowych O Charakterze PPrzewodnikowym W Polu Mikrofalowym [PbMoO4 I PbWO4. <i>Archives of Metallurgy and Materials</i> , <b>2013</b> , 58, 217-222		17
79	Unconventional molecular scale logic devices <b>2013</b> , 654-675		
78	New Type of Photoactive Materials Based on TiO2 Modified by Anthraquinone Derivatives / Nowe Fotoaktywne Materiały W Oparciu O TiO2 Modyfikowany Pochodnymi Antrachinonu. <i>Archives of Metallurgy and Materials</i> , <b>2013</b> , 58, 269-273		3
77	Photoelectrochemical study of ZnSe electrodeposition on Cu electrode. <i>Journal of Electroanalytical Chemistry</i> , <b>2012</b> , 674, 108-112	4.1	15
76	Catecholate and 2,3-acenediolate complexes of d0 ions as prospective materials for molecular electronics and spintronics. <i>Coordination Chemistry Reviews</i> , <b>2012</b> , 256, 1706-1731	23.2	20
75	Molecular Logic Gates <b>2012</b> , 249-322		
74	Photoelectrochemical Photocurrent Switching and Related Phenomena <b>2012</b> , 165-197		1
73	Photocatalysis Involving a Visible Light-Induced Hole Injection in a Chromate(VI)/TiO2 System. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 21762-21770	3.8	34
72	Introduction to the Theory of Information <b>2012</b> , 1-21		
71	Molecular Computing Systems <b>2012</b> , 323-403		
70	Bioinspired and Biomimetic Logic Devices <b>2012</b> , 405-456		
69	Concluding Remarks and Future Prospects <b>2012</b> , 457-459		
68	Physical and Technological Limits of Classical Electronics <b>2012</b> , 23-35		
67	Changing the Paradigm: Towards Computation with Molecules <b>2012</b> , 37-61		
66	Low-Dimensional Metals and Semiconductors <b>2012</b> , 63-117		
65	Carbon Nanostructures <b>2012</b> , 119-164		

64	Self-Organization and Self-Assembly in Supramolecular Systems <b>2012</b> , 199-223		
63	Molecular-Scale Electronics <b>2012</b> , 225-248		
62	Molecules on Semiconductors. <i>The Electrical Engineering Handbook</i> , <b>2012</b> , 367-396		
61	<b>2012</b> ,		97
60	Molecular Photodiode and Two-channel Optoelectronic Demultiplexer based on the [60]Fullerene-porphyrin Tetrad. <i>Australian Journal of Chemistry</i> , <b>2011</b> , 64, 1409	1.2	6
59	Nanoparticles with logic and numeracy: towards 'Computer-on-a-particle' optoelectronic devices. <i>IET Circuits, Devices and Systems</i> , <b>2011</b> , 5, 103	1.1	6
58	Nanoscale Digital Devices Based on the Photoelectrochemical Photocurrent Switching Effect: Preparation, Properties and Applications. <i>Israel Journal of Chemistry</i> , <b>2011</b> , 51, 36-55	3.4	29
57	Photocurrent Switching Effects in TiO <sub>2</sub> Modified with Ruthenium Polypyridine Complexes. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 12187-12195	3.8	20
56	Towards 'Computer-on-a-Particle' Devices: Optoelectronic 1:2 Demultiplexer Based on Nanostructured Cadmium Sulfide. <i>Australian Journal of Chemistry</i> , <b>2010</b> , 63, 165	1.2	17
55	Photoredox reactions of Cr(III) mixed-ligand complexes. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2010</b> , 209, 121-127	4.7	7
54	Titanium(IV) complexes as direct TiO <sub>2</sub> photosensitizers. <i>Coordination Chemistry Reviews</i> , <b>2010</b> , 254, 2687-2701	3.2	153
53	Arithmetic Device Based on Multiple Schottky-like Junctions. <i>Australian Journal of Chemistry</i> , <b>2010</b> , 63, 1330	1.2	16
52	Anomalous Photocathodic Behavior of CdS within the Urbach Tail Region. <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 6774-6784	3.8	41
51	Nanoscale optoelectronic switches and logic devices. <i>Nanoscale</i> , <b>2009</b> , 1, 299-316	7.7	61
50	Adsorption of selected ions on the anatase TiO <sub>2</sub> (101) surface: a density-functional study. <i>Molecular Simulation</i> , <b>2009</b> , 35, 567-576	2	9
49	Photosensitization and Photocurrent Switching in Carminic Acid/Titanium Dioxide Hybrid Material. <i>Journal of Physical Chemistry C</i> , <b>2008</b> , 112, 19131-19141	3.8	33
48	Metal-to-metal electron-transfer emission in cyanide-bridged chromium-ruthenium complexes: effects of configurational mixing between ligand field and charge transfer excited states. <i>Inorganic Chemistry</i> , <b>2008</b> , 47, 10921-34	5.1	19
47	Digital information processing in molecular systems. <i>Chemical Reviews</i> , <b>2008</b> , 108, 3481-548	68.1	714

46	Photosensitization and the photocurrent switching effect in nanocrystalline titanium dioxide functionalized with iron(II) complexes: a comparative study. <i>Chemistry - A European Journal</i> , <b>2007</b> , 13, 5676-87	4.8	51
45	Biomedical implications of information processing in chemical systems: non-classical approach to photochemistry of coordination compounds. <i>BioSystems</i> , <b>2007</b> , 90, 738-49	1.9	8
44	Photochemistry of the [FeIII(edta)(H <sub>2</sub> O)] <sup>-</sup> and [FeIII(edta)(OH)] <sup>2-</sup> complexes in presence of environmentally relevant species. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2007</b> , 188, 128-134	4.7	17
43	Bioinspired nanodevice based on the folic acid/titanium dioxide system. <i>Chemistry - an Asian Journal</i> , <b>2007</b> , 2, 580-90	4.5	27
42	Photoelectrochemical Photocurrent Switching Effect: A New Platform for Molecular Logic Devices. <i>Chimia</i> , <b>2007</b> , 61, 831-834	1.3	30
41	Redox-controlled photosensitization of nanocrystalline titanium dioxide. <i>ChemPhysChem</i> , <b>2006</b> , 7, 2384-91	3.1	41
40	Synthesis, structure and photoelectrochemical properties of the TiO <sub>2</sub> /Prussian blue nanocomposite. <i>Journal of Materials Chemistry</i> , <b>2006</b> , 16, 4603-4611		49
39	Optoelectronic switches based on wide band gap semiconductors. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 15275-83	3.4	59
38	Light-driven OR and XOR programmable chemical logic gates. <i>Journal of the American Chemical Society</i> , <b>2006</b> , 128, 4550-1	16.4	135
37	Photochemistry of the [Fe <sub>4</sub> (μ <sub>3</sub> -S) <sub>3</sub> (NO) <sub>7</sub> ] <sup>-</sup> complex in the presence of S-nucleophiles: a spectroscopic study. <i>Nitric Oxide - Biology and Chemistry</i> , <b>2006</b> , 14, 247-60	5	8
36	The role of photoinduced electron transfer processes in photodegradation of the [Fe <sub>4</sub> (μ <sub>3</sub> -S) <sub>3</sub> (NO) <sub>7</sub> ] <sup>-</sup> cluster. <i>Nitric Oxide - Biology and Chemistry</i> , <b>2006</b> , 15, 370-9	5	11
35	Chemical switches and logic gates based on surface modified semiconductors. <i>Comptes Rendus Chimie</i> , <b>2006</b> , 9, 315-324	2.7	42
34	Working prototype of an optoelectronic XOR/OR/YES reconfigurable logic device based on nanocrystalline semiconductors. <i>Solid-State Electronics</i> , <b>2006</b> , 50, 1649-1655	1.7	30
33	Solid-state structures and magnetic properties of halide-bridged, face-to-face bis-nickel(II)-macrocyclic ligand complexes: ligand-mediated interchanges of electronic configuration. <i>Inorganic Chemistry</i> , <b>2005</b> , 44, 6019-33	5.1	19
32	Interplay between iron complexes, nitric oxide and sulfur ligands: Structure, (photo)reactivity and biological importance. <i>Coordination Chemistry Reviews</i> , <b>2005</b> , 249, 2408-2436	23.2	81
31	Bioinorganic photochemistry: frontiers and mechanisms. <i>Chemical Reviews</i> , <b>2005</b> , 105, 2647-94	68.1	620
30	Molecular logic gates based on pentacyanoferrate complexes: from simple gates to three-dimensional logic systems. <i>Chemistry - A European Journal</i> , <b>2004</b> , 10, 2520-8	4.8	92
29	Molecular switches based on cyanoferrate complexes. <i>Coordination Chemistry Reviews</i> , <b>2002</b> , 229, 17-26	23.2	34



28	An electrospray ionization mass spectrometry study of the nitroprusside-thiolate system. <i>Dalton Transactions RSC</i> , <b>2002</b> , 3649-3655		13
27	Reactions of the $[\text{Fe}(\text{CN})_5\text{NO}]_2^{2-}$ complex with biologically relevant thiols. <i>New Journal of Chemistry</i> , <b>2002</b> , 26, 1495-1502	3.6	38
26	S-Nitrosothiols: Materials, Reactivity and Mechanisms. <i>Progress in Reaction Kinetics and Mechanism</i> , <b>2001</b> , 26, 1-58	0.5	61
25	Photochemistry of the $[\text{Fe}(\text{CN})_5\text{N}(\text{O})\text{SR}]_3^{3-}$ complex. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2001</b> , 143, 99-108	4.7	22
24	Ligand and medium controlled photochemistry of iron and ruthenium mixed-ligand complexes: prospecting for versatile systems. <i>Coordination Chemistry Reviews</i> , <b>2000</b> , 208, 277-297	23.2	48
23	Photochemistry of the $[\text{Fe}(\text{CN})_5\text{NO}]_2^{2-}$ thiolate system. <i>Journal of the Chemical Society Dalton Transactions</i> , <b>1999</b> , 2353-2358		17
22	Photoinduced Electron Transfer in Proteins 209-226		
21	Light and Matter 13-18		
20	Photodelivery and Phototargeting 345-351		
19	Photochemical Reactions 41-76		
18	Photodynamic Inactivation of Microorganisms 335-343		1
17	Photophysical Deactivation of Electronic Excited States 25-33		
16	Photocatalysis in Environmental Protection 359-376		
15	Photochemistry and Photophysics of Supramolecular Systems and Nanoassemblies 77-105		
14	Fluorescent and Chromogenic Sensing and Labelling 257-292		
13	Phototoxicity and Photoprotection 353-358		
12	Heterogeneous (Photo)Catalysis and Biogenesis on Earth 157-167		
11	Kinetics of the Excited-State Decay 35-40		



- 10 Solar Radiation and Terrestrial Environment127-155
- 9 Photoenzymes189-207
- 8 Foundation and Evolution of Photosynthesis169-187
- 7 Therapeutic Strategies293-334
- 6 Light and Biomatter247-255
- 5 From Interstellar Space to Planetary Atmospheres107-125
- 4 Philosophy of Bioinorganic Photochemistry1-12
- 3 Nucleic Acid Photocleavage and Charge Transport227-246
- 2 Formation and Properties of Electronic Excited States19-23
- 1 Light-Induced Synaptic Effects Controlled by Incorporation of Charge-Trapping Layer into Hybrid Perovskite Memristor. *Advanced Electronic Materials*,2100838 6.4 1