

# Konrad SzaciÅowski

## List of Publications by Year in descending order

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130  
papers

4,153  
citations

147726

31  
h-index

123376

61  
g-index

151  
all docs

151  
docs citations

151  
times ranked

4802  
citing authors

#	ARTICLE	IF	CITATIONS
1	Light-Induced Synaptic Effects Controlled by Incorporation of Charge-Trapping Layer into Hybrid Perovskite Memristor. <i>Advanced Electronic Materials</i> , 2022, 8, .	2.6	9
2	Supercapacitance in graphene oxide materials modified with tetrapyrrole dyes: a mechanistic study. <i>Nanoscale</i> , 2022, 14, 8534-8547.	2.8	1
3	KNOWM memristors in a bridge synapse delay-based reservoir computing system for detection of epileptic seizures. <i>International Journal of Parallel, Emergent and Distributed Systems</i> , 2022, 37, 512-527.	0.7	7
4	Towards Embedded Computation with Building Materials. <i>Materials</i> , 2021, 14, 1724.	1.3	5
5	In Situ Regeneration of Copper-Coated Gas Diffusion Electrodes for Electroreduction of CO <sub>2</sub> to Ethylene. <i>Materials</i> , 2021, 14, 3171.	1.3	5
6	Ultrasound Supported Galvanostatic Deposition of Zn Coatings Reinforced with Nano-, Submicro-, and Micro-SiC Particles in Weak Acidic Chloride Baths. <i>Materials</i> , 2021, 14, 3033.	1.3	1
7	Spectral properties of polycrystalline MoS <sub>2</sub> films grown by RF magnetron sputtering. <i>Journal of Applied Physics</i> , 2021, 130, 224302.	1.1	1
8	Synthesis and spectroscopic studies of diaza-8-crown-4-dinitrophenyl ethers. <i>Supramolecular Chemistry</i> , 2020, 32, 13-22.	1.5	0
9	Neuromorphic Applications of a Multivalued [Sn <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> , 2020, 2, 329-338.	2.0	16
10	Liquid metal droplet solves maze. <i>Soft Matter</i> , 2020, 16, 1455-1462.	1.2	18
11	On the influence of magnetic field on electrodeposition of Ni-TiO <sub>2</sub> composites from a citrate baths. <i>Materials Chemistry and Physics</i> , 2020, 255, 123550.	2.0	9
12	Towards synthetic neural networks: can artificial electrochemical neurons be coupled with artificial memristive synapses?. <i>Japanese Journal of Applied Physics</i> , 2020, 59, SI0801.	0.8	14
13	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> , 2020, 18, 4773-4782.	1.5	8
14	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> , 2020, 167, 042504.	1.3	5
15	Light intensity-induced photocurrent switching effect. <i>Nature Communications</i> , 2020, 11, 854.	5.8	25
16	Halogen-containing semiconductors: From artificial photosynthesis to unconventional computing. <i>Coordination Chemistry Reviews</i> , 2020, 415, 213316.	9.5	21
17	Bismuth triiodide complexes: structure, spectroscopy, electronic properties, and memristive properties. <i>Journal of Materials Chemistry C</i> , 2020, 8, 6136-6148.	2.7	6
18	In-material neuromimetic devices: dynamics, information processing and pattern recognition. <i>Japanese Journal of Applied Physics</i> , 2020, 59, 050504.	0.8	17

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19	On Buildings that Compute. A Proposal. <i>Emergence, Complexity and Computation</i> , 2020, , 311-335.	0.2	1
20	Hardware Realization of the Pattern Recognition with an Artificial Neuromorphic Device Exhibiting a Short-Term Memory. <i>Molecules</i> , 2019, 24, 2738.	1.7	12
21	Synaptic plasticity, metaplasticity and memory effects in hybrid organic–inorganic bismuth-based materials. <i>Nanoscale</i> , 2019, 11, 1080-1090.	2.8	36
22	Memristor in a Reservoir System—Experimental Evidence for High-Level Computing and Neuromorphic Behavior of $PbI_2$ . <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 17009-17018.	4.0	23
23	Influence of pulse frequency on physicochemical properties of InSb films obtained via electrodeposition. <i>Electrochimica Acta</i> , 2019, 304, 396-404.	2.6	13
24	Supramolecular Complexes of Graphene Oxide with Porphyrins: An Interplay between Electronic and Magnetic Properties. <i>Molecules</i> , 2019, 24, 688.	1.7	26
25	Experimental and Theoretical Evidence of Photocurrent Amplification in Hybrid Material Based on Dibenzo-18-Crown-6. , 2019, , .		0
26	Fluorimetric naphthalimide-based polymer logic beads responsive to acidity and oxidisability. <i>Journal of Materials Chemistry C</i> , 2019, 7, 15225-15232.	2.7	21
27	New approaches towards chemosensing. , 2019, , .		0
28	Molecular engineering of logic gate types by module rearrangement in $\mu$ Pourbaix Sensors™: the effect of excited-state electric fields. <i>Organic and Biomolecular Chemistry</i> , 2018, 16, 6195-6201.	1.5	23
29	Molecules, semiconductors, light and information: Towards future sensing and computing paradigms. <i>Coordination Chemistry Reviews</i> , 2018, 365, 23-40.	9.5	32
30	Spectroelectrochemical analysis of TiO <sub>2</sub> electronic states – Implications for the photocatalytic activity of anatase and rutile. <i>Catalysis Today</i> , 2018, 309, 35-42.	2.2	36
31	Heavy pnictogen chalcogenides: the synthesis, structure and properties of these rediscovered semiconductors. <i>Chemical Communications</i> , 2018, 54, 12133-12162.	2.2	39
32	Triiodide Organic Salts: Photoelectrochemistry at the Border between Insulators and Semiconductors. <i>ChemElectroChem</i> , 2018, 5, 3486-3497.	1.7	8
33	Charge transfer tuning in TiO <sub>2</sub> hybrid nanostructures with acceptor–acceptor systems. <i>Journal of Materials Chemistry C</i> , 2017, 5, 2415-2424.	2.7	4
34	Organotitanium-Based Nanostructures as a Suitable Platform for the Implementation of Binary, Ternary, and Fuzzy Logic Systems. <i>ChemPhysChem</i> , 2017, 18, 1798-1810.	1.0	16
35	Water-Soluble Colorimetric Amino[ <i>bis</i> (ethanesulfonate)] Azobenzene pH Indicators: A UV–Vis Absorption, DFT, and <sup>1</sup> Cl– <sup>15</sup> N NMR Spectroscopy Study. <i>ACS Omega</i> , 2017, 2, 6159-6166.	1.6	9
36	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> , 2017, 164, D613-D620.	1.3	5

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37	Unconventional Computing Realized with Hybrid Materials Exhibiting the PhotoElectrochemical Photocurrent Switching (PEPS) Effect. <i>Emergence, Complexity and Computation</i> , 2017, , 429-467.	0.2	5
38	Synaptic Behavior in an Optoelectronic Device Based on Semiconductorâ€Nanotube Hybrid. <i>Advanced Electronic Materials</i> , 2016, 2, 1500471.	2.6	40
39	Novel information processing devices: A material odyssey. , 2016, , .		0
40	Composites of cadmium sulfide and copolymers of aromatic amines. , 2016, , .		0
41	Interactions between graphene oxide and wide band gap semiconductors. <i>Journal of Physics: Conference Series</i> , 2016, 745, 032102.	0.3	6
42	Coordination chemistry for information acquisition and processing. <i>Coordination Chemistry Reviews</i> , 2016, 325, 135-160.	9.5	26
43	Colorimetric Naphthaleneâ€Based Thiosemicarbazide Anion Chemosensors with an Internal Charge Transfer Mechanism. <i>European Journal of Organic Chemistry</i> , 2016, 2016, 4415-4422.	1.2	9
44	Influence of Iâ€Iodide Intermolecular Interactions on Electronic Properties of Tin(IV) Iodide Semiconducting Complexes. <i>Inorganic Chemistry</i> , 2016, 55, 5935-5945.	1.9	20
45	Electrochemically deposited nanocrystalline InSb thin films and their electrical properties. <i>Journal of Materials Chemistry C</i> , 2016, 4, 1345-1350.	2.7	23
46	A three-valued photoelectrochemical logic device realising accept anything and consensus operations. <i>Chemical Communications</i> , 2015, 51, 3559-3561.	2.2	32
47	Photoelectrochemistry of n-type antimony sulfoiodide nanowires. <i>Nanotechnology</i> , 2015, 26, 105710.	1.3	28
48	Tuning of electronic properties of fullerene-oligothiophene layers. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	5
49	Lead molybdate â€“ a promising material for optoelectronics and photocatalysis. <i>Journal of Materials Chemistry C</i> , 2015, 3, 2614-2623.	2.7	26
50	TiO <sub>2</sub> â€anthraquinone hybrids: from quantum-chemical design to functional materials. <i>Journal of Materials Chemistry C</i> , 2015, 3, 4148-4155.	2.7	10
51	UV-visible and <sup>1</sup> Hâ€ <sup>15</sup> N NMR spectroscopic studies of colorimetric thiosemicarbazide anion sensors. <i>Organic and Biomolecular Chemistry</i> , 2015, 13, 1662-1672.	1.5	28
52	Acoustic wave sensing devices and their LTCC packaging. , 2014, , .		3
53	Kinetics and Mechanism of Redox Reaction between Tetrachloroaurate(III) Ions and Hydrazine. <i>International Journal of Chemical Kinetics</i> , 2014, 46, 328-337.	1.0	11
54	Ground and excited state properties of alizarin and its isomers. <i>Dyes and Pigments</i> , 2014, 103, 202-213.	2.0	45

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55	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> , 2014, 118, 24915-24924.	1.5	14
56	Bi <sub>x</sub> La <sub>1-x</sub> VO <sub>4</sub> solid solutions: tuning of electronic properties via stoichiometry modifications. <i>Nanoscale</i> , 2014, 6, 2244-2254.	2.8	22
57	Supramolecular assemblies of semiconductor quantum dots and a bis(bipyridinium) derivative: luminescence quenching and aggregation phenomena. <i>RSC Advances</i> , 2014, 4, 29847-29854.	1.7	3
58	Synthesis and properties of ZnTe and ZnTe/ZnS core/shell semiconductor nanocrystals. <i>Journal of Materials Chemistry C</i> , 2014, 2, 2877-2886.	2.7	39
59	Optical signal demultiplexing and conversion in the fullerene—oligothiophene—CdS system. <i>Applied Surface Science</i> , 2014, 319, 285-290.	3.1	9
60	The Deposition of Gold Nanoparticles Onto Activated Carbon. <i>Archives of Metallurgy and Materials</i> , 2014, 59, 899-903.	0.6	1
61	Redox characterization of semiconductors based on electrochemical measurements combined with UV-Vis diffuse reflectance spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 14256.	1.3	32
62	Alizarin complexone: an interesting ligand for designing TiO <sub>2</sub> -hybrid nanostructures. <i>New Journal of Chemistry</i> , 2013, 37, 969.	1.4	9
63	Photoelectrochemistry of n-type bismuth oxyiodide. <i>Electrochimica Acta</i> , 2013, 104, 448-453.	2.6	61
64	Photoluminescence Enhancement of CdSe and CdSe—ZnS Nanocrystals by On-Surface Ligand Modification. <i>European Journal of Inorganic Chemistry</i> , 2013, 2013, 3550-3556.	1.0	8
65	Novel, Microwave Assisted Route of Synthesis of Binary Oxide Semiconducting Phases — PbMoO <sub>4</sub> And PbWO <sub>4</sub> / Nowa Metoda Syntezy Binarnych Faz Tlenkowych O Charakterze Półprzewodnikowym W Polu Mikrofalowym — PbMoO <sub>4</sub> I PbWO <sub>4</sub> . <i>Archives of Metallurgy and Materials</i> , 2013, 58, 217-222.	0.6	18
66	Unconventional molecular scale logic devices. , 2013, , 654-675.		0
67	New Type of Photoactive Materials Based on TiO <sub>2</sub> Modified by Anthraquinone Derivatives / Nowe Fotoaktywne Materiały W Oparciu O TiO <sub>2</sub> Modyfikowany Pochodnymi Antrachinonu. <i>Archives of Metallurgy and Materials</i> , 2013, 58, 269-273.	0.6	4
68	Catecholate and 2,3-acenediolate complexes of d0 ions as prospective materials for molecular electronics and spintronics. <i>Coordination Chemistry Reviews</i> , 2012, 256, 1706-1731.	9.5	22
69	Photocatalysis Involving a Visible Light-Induced Hole Injection in a Chromate(VI)—TiO <sub>2</sub> System. <i>Journal of Physical Chemistry C</i> , 2012, 116, 21762-21770.	1.5	39
70	Photoelectrochemical study of ZnSe electrodeposition on Cu electrode. <i>Journal of Electroanalytical Chemistry</i> , 2012, 674, 108-112.	1.9	21
71	Molecules on Semiconductors. <i>The Electrical Engineering Handbook</i> , 2012, , 367-396.	0.2	0
72	Photocurrent Switching Effects in TiO <sub>2</sub> Modified with Ruthenium Polypyridine Complexes. <i>Journal of Physical Chemistry C</i> , 2011, 115, 12187-12195.	1.5	25

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73	Molecular Photodiode and Two-channel Optoelectronic Demultiplexer based on the [60]Fullerene-porphyrin Tetrad. Australian Journal of Chemistry, 2011, 64, 1409.	0.5	6
74	Nanoparticles with logic and numeracy: towards "computer-on-a-particle"™ optoelectronic devices. IET Circuits, Devices and Systems, 2011, 5, 103.	0.9	6
75	Nanoscale Digital Devices Based on the Photoelectrochemical Photocurrent Switching Effect: Preparation, Properties and Applications. Israel Journal of Chemistry, 2011, 51, 36-55.	1.0	36
76	Towards 'Computer-on-a-Particle' Devices: Optoelectronic 1:2 Demultiplexer Based on Nanostructured Cadmium Sulfide. Australian Journal of Chemistry, 2010, 63, 165.	0.5	18
77	Photoredox reactions of Cr(III) mixed-ligand complexes. Journal of Photochemistry and Photobiology A: Chemistry, 2010, 209, 121-127.	2.0	8
78	Titanium(IV) complexes as direct TiO <sub>2</sub> photosensitizers. Coordination Chemistry Reviews, 2010, 254, 2687-2701.	9.5	171
79	Arithmetic Device Based on Multiple Schottky-like Junctions. Australian Journal of Chemistry, 2010, 63, 1330.	0.5	18
80	Anomalous Photocathodic Behavior of CdS within the Urbach Tail Region. Journal of Physical Chemistry C, 2009, 113, 6774-6784.	1.5	42
81	Nanoscale optoelectronic switches and logic devices. Nanoscale, 2009, 1, 299.	2.8	74
82	Adsorption of selected ions on the anatase TiO <sub>2</sub> (101) surface: a density-functional study. Molecular Simulation, 2009, 35, 567-576.	0.9	10
83	Digital Information Processing in Molecular Systems. Chemical Reviews, 2008, 108, 3481-3548.	23.0	777
84	Photosensitization and Photocurrent Switching in Carminic Acid/Titanium Dioxide Hybrid Material. Journal of Physical Chemistry C, 2008, 112, 19131-19141.	1.5	38
85	Metal-to-Metal Electron-Transfer Emission in Cyanide-Bridged Chromium~Ruthenium Complexes: Effects of Configurational Mixing Between Ligand Field and Charge Transfer Excited States. Inorganic Chemistry, 2008, 47, 10921-10934.	1.9	21
86	Photoelectrochemical Photocurrent Switching Effect: A New Platform for Molecular Logic Devices. Chimia, 2007, 61, 831-834.	0.3	34
87	Photosensitization and the Photocurrent Switching Effect in Nanocrystalline Titanium Dioxide Functionalized with Iron(II) Complexes: A Comparative Study. Chemistry - A European Journal, 2007, 13, 5676-5687.	1.7	55
88	Biomedical implications of information processing in chemical systems: Non-classical approach to photochemistry of coordination compounds. BioSystems, 2007, 90, 738-749.	0.9	8
89	Photochemistry of the [FeIII(edta)(H <sub>2</sub> O)] <sup>3-</sup> and [FeIII(edta)(OH)] <sup>2-</sup> complexes in presence of environmentally relevant species. Journal of Photochemistry and Photobiology A: Chemistry, 2007, 188, 128-134.	2.0	20
90	Bioinspired Nanodevice Based on the Folic Acid/Titanium Dioxide System. Chemistry - an Asian Journal, 2007, 2, 580-590.	1.7	30

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91	Synthesis, structure and photoelectrochemical properties of the TiO <sub>2</sub> @Prussian blue nanocomposite. <i>Journal of Materials Chemistry</i> , 2006, 16, 4603-4611.	6.7	54
92	Optoelectronic Switches Based on Wide Band Gap Semiconductors. <i>Journal of Physical Chemistry B</i> , 2006, 110, 15275-15283.	1.2	63
93	Light-Driven OR and XOR Programmable Chemical Logic Gates. <i>Journal of the American Chemical Society</i> , 2006, 128, 4550-4551.	6.6	149
94	Photochemistry of the [Fe <sub>4</sub> ( $\frac{1}{4}$ -S) <sub>3</sub> (NO) <sub>7</sub> ] <sup>3+</sup> complex in the presence of S-nucleophiles: A spectroscopic study. <i>Nitric Oxide - Biology and Chemistry</i> , 2006, 14, 247-260.	1.2	8
95	The role of photoinduced electron transfer processes in photodegradation of the [Fe <sub>4</sub> ( $\frac{1}{4}$ -S) <sub>3</sub> (NO) <sub>7</sub> ] <sup>3+</sup> cluster. <i>Nitric Oxide - Biology and Chemistry</i> , 2006, 15, 370-379.	1.2	11
96	Chemical switches and logic gates based on surface modified semiconductors. <i>Comptes Rendus Chimie</i> , 2006, 9, 315-324.	0.2	46
97	Working prototype of an optoelectronic XOR/OR/YES reconfigurable logic device based on nanocrystalline semiconductors. <i>Solid-State Electronics</i> , 2006, 50, 1649-1655.	0.8	33
98	Redox-Controlled Photosensitization of Nanocrystalline Titanium Dioxide. <i>ChemPhysChem</i> , 2006, 7, 2384-2391.	1.0	44
99	Interplay between iron complexes, nitric oxide and sulfur ligands: Structure, (photo)reactivity and biological importance. <i>Coordination Chemistry Reviews</i> , 2005, 249, 2408-2436.	9.5	87
100	Bioinorganic Photochemistry: Frontiers and Mechanisms. <i>Chemical Reviews</i> , 2005, 105, 2647-2694.	23.0	671
101	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> , 2005, 44, 6019-6033.	1.9	21
102	Molecular Logic Gates Based on Pentacyanoferrate Complexes: From Simple Gates to Three-Dimensional Logic Systems. <i>Chemistry - A European Journal</i> , 2004, 10, 2520-2528.	1.7	103
103	An electrospray ionization mass spectrometry study of the nitroprusside@cation@thiolate system. <i>Dalton Transactions RSC</i> , 2002, , 3649-3655.	2.3	14
104	Reactions of the [Fe(CN) <sub>5</sub> NO] <sub>2</sub> <sup>3+</sup> complex with biologically relevant thiols. <i>New Journal of Chemistry</i> , 2002, 26, 1495-1502.	1.4	42
105	Molecular switches based on cyanoferrate complexes. <i>Coordination Chemistry Reviews</i> , 2002, 229, 17-26.	9.5	40
106	S-Nitrosothiols: Materials, Reactivity and Mechanisms. <i>Progress in Reaction Kinetics and Mechanism</i> , 2001, 26, 1-58.	1.1	66
107	Photochemistry of the [Fe(CN) <sub>5</sub> N(O)SR] <sub>3</sub> <sup>3+</sup> complex. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2001, 143, 99-108.	2.0	24
108	Ligand and medium controlled photochemistry of iron and ruthenium mixed-ligand complexes: prospecting for versatile systems. <i>Coordination Chemistry Reviews</i> , 2000, 208, 277-297.	9.5	53

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109	Photochemistry of the [Fe(CN) <sub>5</sub> NO] <sup>2-</sup> thiolate system. Journal of the Chemical Society Dalton Transactions, 1999, , 2353-2358.	1.1	18
110	Solar Radiation and Terrestrial Environment. , 0, , 127-155.		0
111	Photoenzymes. , 0, , 189-207.		0
112	Foundation and Evolution of Photosynthesis. , 0, , 169-187.		0
113	Therapeutic Strategies. , 0, , 293-334.		0
114	Light and Biomatter. , 0, , 247-255.		0
115	From Interstellar Space to Planetary Atmospheres. , 0, , 107-125.		0
116	Philosophy of Bioinorganic Photochemistry. , 0, , 1-12.		0
117	Nucleic Acid Photocleavage and Charge Transport. , 0, , 227-246.		0
118	Formation and Properties of Electronic Excited States. , 0, , 19-23.		0
119	Photoinduced Electron Transfer in Proteins. , 0, , 209-226.		1
120	Light and Matter. , 0, , 13-18.		0
121	Photodelivery and Phototargeting. , 0, , 345-351.		0
122	Photochemical Reactions. , 0, , 41-76.		0
123	Photodynamic Inactivation of Microorganisms. , 0, , 335-343.		1
124	Photophysical Deactivation of Electronic Excited States. , 0, , 25-33.		0
125	Photocatalysis in Environmental Protection. , 0, , 359-376.		0
126	Photochemistry and Photophysics of Supramolecular Systems and Nanoassemblies. , 0, , 77-105.		0



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127	Fluorescent and Chromogenic Sensing and Labelling. , 0, , 257-292.		0
128	Phototoxicity and Photoprotection. , 0, , 353-358.		0
129	Heterogeneous (Photo)Catalysis and Biogenesis on Earth. , 0, , 157-167.		0
130	Kinetics of the Excited-State Decay. , 0, , 35-40.		0