

# Jan Plutnar

## List of Publications by Year in descending order

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45  
papers

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citations

304743

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345221

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all docs

45  
docs citations

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times ranked

1809  
citing authors

#	ARTICLE	IF	CITATIONS
1	Fluorinated Transition Metal Carbides for Flexible Supercapacitors. ACS Applied Energy Materials, 2022, 5, 6353-6362.	5.1	6
2	Six-Degree-of-Freedom Steerable Visible-Light-Driven Microsubmarines Using Water as a Fuel: Application for Explosives Decontamination. Small, 2021, 17, e2100294.	10.0	22
3	A Maze in Plastic Wastes: Autonomous Motile Photocatalytic Microrobots against Microplastics. ACS Applied Materials & Interfaces, 2021, 13, 25102-25110.	8.0	53
4	Two-Dimensional Functionalized Germananes as Photoelectrocatalysts. ACS Nano, 2021, 15, 11681-11693.	14.6	25
5	Inherent impurities in 3D-printed electrodes are responsible for catalysis towards water splitting. Journal of Materials Chemistry A, 2020, 8, 1120-1126.	10.3	57
6	Layered black phosphorus as a reducing agent – decoration with group 10 elements. RSC Advances, 2020, 10, 36452-36458.	3.6	5
7	Chemically programmable microrobots weaving a web from hormones. Nature Machine Intelligence, 2020, 2, 711-718.	16.0	46
8	Near-Atomic-Thick Bismuthene Oxide Microsheets for Flexible Aqueous Anodes: Boosted Performance upon 3D to 2D Transition. ACS Applied Materials & Interfaces, 2020, 12, 55936-55944.	8.0	13
9	Multifunctional Visible-Light Powered Micromotors Based on Semiconducting Sulfur- and Nitrogen-Containing Donor-Acceptor Polymer. Advanced Functional Materials, 2020, 30, 2002701.	14.9	42
10	Bismuthene Microsheets: Bismuthene Metallurgy: Transformation of Bismuth Particles to Ultrahigh-Aspect-Ratio 2D Microsheets (Small 29/2020). Small, 2020, 16, 2070163.	10.0	0
11	Chemical Microrobots as Self-Propelled Microbrushes against Dental Biofilm. Cell Reports Physical Science, 2020, 1, 100181.	5.6	40
12	Swarming of Perovskite-Like Bi <sub>2</sub> WO <sub>6</sub> Microrobots Destroy Textile Fibers under Visible Light. Advanced Functional Materials, 2020, 30, 2007073.	14.9	48
13	Bismuthene Metallurgy: Transformation of Bismuth Particles to Ultrahigh-Aspect-Ratio 2D Microsheets. Small, 2020, 16, e2002037.	10.0	14
14	Cross-Bridged Cyclam with Phosphonate and Phosphinate Pendant Arms: Chelators for Copper Radioisotopes with Fast Complexation. Inorganic Chemistry, 2020, 59, 8432-8443.	4.0	8
15	Alkali Metal Arenides as a Universal Synthetic Tool for Layered 2D Germanene Modification. Angewandte Chemie, 2019, 131, 16669-16674.	2.0	0
16	Alkali Metal Arenides as a Universal Synthetic Tool for Layered 2D Germanene Modification. Angewandte Chemie - International Edition, 2019, 58, 16517-16522.	13.8	14
17	Preserving Fine Structure Details and Dramatically Enhancing Electron Transfer Rates in Graphene 3D-Printed Electrodes via Thermal Annealing: Toward Nitroaromatic Explosives Sensing. ACS Applied Materials & Interfaces, 2019, 11, 35371-35375.	8.0	82
18	Plasmonic Self-Propelled Nanomotors for Explosives Detection via Solution-Based Surface Enhanced Raman Scattering. Advanced Functional Materials, 2019, 29, 1903041.	14.9	35

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19	Selenium covalently modified graphene: towards gas sensing. 2D Materials, 2019, 6, 034006.	4.4	4
20	Atomic Layer Deposition as a General Method Turns any 3D-Printed Electrode into a Desired Catalyst: Case Study in Photoelectrochemistry. Advanced Energy Materials, 2019, 9, 1900994.	19.5	28
21	Fluorine saturation on thermally reduced graphene. Applied Materials Today, 2019, 15, 343-349.	4.3	8
22	Exfoliation of Calcium Germanide by Alkyl Halides. Chemistry of Materials, 2019, 31, 10126-10134.	6.7	18
23	Mechanical vs Electronic Strain: Oval-Shaped Alkynyl-Pt(II)-Phosphine Macrocycles. Organometallics, 2019, 38, 4633-4644.	2.3	6
24	Chemotaktische Mikro- und Nanomaschinen. Angewandte Chemie, 2019, 131, 2212-2218.	2.0	7
25	Chemotactic Micro- and Nanodevices. Angewandte Chemie - International Edition, 2019, 58, 2190-2196.	13.8	25
26	The chemistry of CVD graphene. Journal of Materials Chemistry C, 2018, 6, 6082-6101.	5.5	95
27	Fluorographenes for Energy and Sensing Application: The Amount of Fluorine Matters. ACS Omega, 2018, 3, 17700-17706.	3.5	6
28	Fluorination of Black Phosphorus "Will Black Phosphorus Burn Down in the Elemental Fluorine?. Advanced Functional Materials, 2018, 28, 1801438.	14.9	34
29	Products of Degradation of Black Phosphorus in Protic Solvents. ACS Nano, 2018, 12, 8390-8396.	14.6	70
30	Fluorographene and Graphane as an Excellent Platform for Enzyme Biocatalysis. Chemistry - A European Journal, 2018, 24, 16833-16839.	3.3	8
31	Oxidation of the B12 and CB11 Icosahedral Anions. , 2018, , 137-158.		0
32	Electron Transfer Mechanism of Substituted Benzimidazoles: Dimer Switching, Oscillations, and Search for Singlet Fission Properties. Journal of Physical Chemistry C, 2017, 121, 9963-9969.	3.1	5
33	Mechanism of Surface Alkylation of a Gold Aerogel with Tetra-n-butylstannane-d36: Identification of Byproducts. Journal of Physical Chemistry Letters, 2017, 8, 2339-2343.	4.6	3
34	Fluorographene Modified by Grignard Reagents: A Broad Range of Functional Nanomaterials. Chemistry - A European Journal, 2017, 23, 1956-1964.	3.3	30
35	Metal Complexes with Very Large Dipole Moments: the Anionic Carborane Nitriles 12-NCB11X11(X =) Tj ETOq1 1 0.784314 ngB	4.0	22
36	Thermodynamic and Kinetic Study of Scandium(III) Complexes of DTPA and DOTA: A Step Toward Scandium Radiopharmaceuticals. Chemistry - A European Journal, 2014, 20, 7944-7955.	3.3	55

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37	Complexation of Metal Ions with TRAP (1,4,7-Triazacyclononane Phosphinic Acid) Ligands and 1,4,7-Triazacyclononane-1,4,7-triacetic Acid: Phosphinate-Containing Ligands as Unique Chelators for Trivalent Gallium. <i>Inorganic Chemistry</i> , 2012, 51, 577-590.	4.0	96
38	Bone-seeking TRAP conjugates: surprising observations and their implications on the development of gallium-68-labeled bisphosphonates. <i>EJNMMI Research</i> , 2012, 2, 13.	2.5	29
39	A New Tris(phosphonomethyl) Monoacetic Acid Cyclam Derivative: Synthesis, Acid-Base and Metal Complexation Studies. <i>European Journal of Inorganic Chemistry</i> , 2011, 2011, 527-538.	2.0	5
40	A Triazacyclononane-Based Bifunctional Phosphinate Ligand for the Preparation of Multimeric <sup>68</sup> Ga Tracers for Positron Emission Tomography. <i>Chemistry - A European Journal</i> , 2010, 16, 7174-7185.	3.3	138
41	Metal Complexes of 4,11-Dimethyl-1,4,8,11-tetraazacyclotetradecane-1,8-bis(methylphosphonic acid) - Thermodynamic and Formation/Decomplexation Kinetic Studies. <i>European Journal of Inorganic Chemistry</i> , 2009, 2009, 3577-3592.	2.0	29
42	Unsymmetrically substituted side-bridged cyclam derivatives and their Cu(II) and Zn(II) complexes. <i>New Journal of Chemistry</i> , 2008, 32, 496-504.	2.8	20
43	Ternary Complexes of Zinc(II), Cyclen and Pyridinecarboxylic Acids. <i>European Journal of Inorganic Chemistry</i> , 2007, 2007, 3974-3987.	2.0	19
44	Thermodynamic, kinetic and solid-state study of divalent metal complexes of 1,4,8,11-tetraazacyclotetradecane (cyclam) bearing two trans (1,8)-methylphosphonic acid pendant arms. <i>Dalton Transactions</i> , 2006, 5184-5197.	3.3	29
45	Novel polymeric metal complexes of calix[4]arene-11,23-diphosphonic acid: synthesis and structure determination. <i>Inorganica Chimica Acta</i> , 2002, 335, 27-35.	2.4	29