Pavel Usov

List of Publications by Year
in descending order

43 papers	1,241 citations	471371 17 h-index	360920 35 g-index
44 all docs	44 docs citations	44 times ranked	2141 citing authors

#	Article	IF	Citations
1	A New Class of Metal-Cyclam-Based Zirconium Metalâ€“Organic Frameworks for CO₂ Adsorption and Chemical Fixation. Journal of the American Chemical Society, 2018, 140, 993-1003.	6.6	176
2	Study of Electrocatalytic Properties of Metalâ€“Organic Framework PCN-223 for the Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2017, 9, 33539-33543.	4.0	143
3	Rapid determination of the optical and redox properties of a metalâ€“organic framework via in situ solid state spectroelectrochemistry. Chemical Communications, 2012, 48, 3945.	2.2	111
4	Intrinsically conducting metalâ€“organic frameworks. MRS Bulletin, 2016, 41, 858-864.	1.7	104
5	Mechanism and Kinetics of Hydrogen Peroxide Decomposition on Platinum Nanocatalysts. ACS Applied Materials & Interfaces, 2018, 10, 21224-21234.	4.0	94
6	Synthesis and Defect Characterization of Phase-Pure Zr-MOFs Based on Meso-tetracarboxyphenylporphyrin. Inorganic Chemistry, 2019, 58, 5145-5153.	1.9	70
7	Benzene, Toluene, and Xylene Transport through UiO-66: Diffusion Rates, Energetics, and the Role of Hydrogen Bonding. Journal of Physical Chemistry C, 2018, 122, 16060-16069.	1.5	60
8	Independent Quantification of Electron and Ion Diffusion in Metallocene-Doped Metalâ€“Organic Frameworks Thin Films. Journal of the American Chemical Society, 2019, 141, 11947-11953.	6.6	57
9	Characterization of Undercoordinated Zr Defect Sites in UiO-66 with Vibrational Spectroscopy of Adsorbed CO. Journal of Physical Chemistry C, 2018, 122, 14582-14589.	1.5	52
10	The Electrochemical Transformation of the Zeolitic Imidazolate Framework ZIF-67 in Aqueous Electrolytes. Electrochimica Acta, 2015, 153, 433-438.	2.6	49
11	Structural and optical investigations of charge transfer complexes involving the radical anions of TCNQ and F₄TCNQ. CrystEngComm, 2016, 18, 8906-8914.	1.3	34
12	Molecular-Level Insight into CO₂ Adsorption on the Zirconium-Based Metalâ€“Organic Framework, UiO-66: A Combined Spectroscopic and Computational Approach. Journal of Physical Chemistry C, 2019, 123, 13731-13738.	1.5	34
13	Insight into Metalâ€“Organic Framework Reactivity: Chemical Water Oxidation Catalyzed by a [Ru(tpy)(dcbpy)(OH₂)]²⁺â€Modified UiOâ€67. ChemSusChem, 2018, 11, 464-471.	3.6	31
14	Probing charge transfer characteristics in a donorâ€“acceptor metalâ€“organic framework by Raman spectroelectrochemistry and pressure-dependence studies. Physical Chemistry Chemical Physics, 2018, 20, 25772-25779.	1.3	28
15	Proton-Coupled Electron Transport in Anthraquinone-Based Zirconium Metalâ€“Organic Frameworks. Inorganic Chemistry, 2017, 56, 13741-13747.	1.9	23
16	Structural and optical investigations of charge transfer complexes involving the F4TCNQ dianion. CrystEngComm, 2014, 16, 5234.	1.3	22
17	Guestâ€“Host Complexes of TCNQ and TCNE with Cu₃(1,3,5-benzenetricarboxylate)₂. Journal of Physical Chemistry C, 2017, 121, 26330-26339.	1.5	18
18	Insights into CO2 adsorption and chemical fixation properties of VPI-100 metalâ€“organic frameworks. Journal of Materials Chemistry A, 2018, 6, 22195-22203.	5.2	17

#	Article	IF	Citations
19	Geometry and energetics of CO adsorption on hydroxylated UiO-66. Physical Chemistry Chemical Physics, 2019, 21, 5078-5085.	1.3	17
20	Magnetic, electrochemical and optical properties of a sulfate-bridged Co(<scp>ii</scp>) imidazole dimer. New Journal of Chemistry, 2014, 38, 5856-5860.	1.4	12
21	Untangling Complex Redox Chemistry in Zeolitic Imidazolate Frameworks Using Fourier Transformed Alternating Current Voltammetry. Analytical Chemistry, 2017, 89, 10181-10187.	3.2	11
22	Spectroscopic, electronic and computational properties of a mixed tetrachalcogenafulvalene and its charge transfer complex. Journal of Materials Chemistry C, 2018, 6, 1092-1104.	2.7	11
23	Interligand Charge-Transfer Interactions in Electroactive Coordination Frameworks Based on <i>N</i>,<i>N</i>â€²-Dicyanoquinonediimine (DCNQI). Inorganic Chemistry, 2018, 57, 9766-9774.	1.9	9
24	Synthesis, characterization, and luminescent properties of two new Zr(IV) metalâ€“organic frameworks based on anthracene derivatives. Canadian Journal of Chemistry, 2018, 96, 875-880.	0.6	7
25	A numerical analysis of the contact of rough viscoelastic bodies in the presence of a layer of viscous lubricant. Prikladnaya Matematika I Mekhanika, 2012, 76, 572-581.	0.4	6
26	Numerical analysis of viscous elastohydrodynamic point contact under stationary conditions. Journal of Friction and Wear, 2010, 31, 1-10.	0.1	5
27	Elastohydrodynamic problem for journal sliding bearing under reciprocating motion. Journal of Friction and Wear, 2016, 37, 204-212.	0.1	5
28	Solidâ€“Gas Phase Synthesis of Coordination Networks by Using Redoxâ€Active Ligands and Elucidation of Their Oxidation Reaction. Chemistry - A European Journal, 2019, 25, 11512-11520.	1.7	5
29	Spectroelectrochemistry: A Powerful Tool for Studying Fundamental Properties and Emerging Applications of Solid-State Materials Including Metalâ€“Organic Frameworks. Australian Journal of Chemistry, 2021, 74, 77.	0.5	5
30	The contact problem for a viscoelastic layer and rigid cylinder during regular sliding. Journal of Friction and Wear, 2009, 30, 246-257.	0.1	4
31	Semi-conducting mixed-valent X₄TCNQ^{Iâˆ’/IIâˆ’} (X = H, F) charge-transfer complexes with C₆H₂(NH₂)₄. Journal of Materials Chemistry C, 2020, 8, 9422-9426.	2.7	4
32	A numerical analysis of the elastohydrodynamic line contact film formation at motion start-up. Journal of Friction and Wear, 2008, 29, 54-65.	0.1	3
33	Effects of lubricant viscoelasticity on film thickness in elastohydrodynamic line contacts during start-up. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2016, 230, 769-782.	1.0	3
34	Pyridinium modification of a hexaazaphenalene skeleton: structure and spectroelectrochemical analysis. CrystEngComm, 2020, 22, 5987-5994.	1.3	3
35	Multi-interactive Coordination Network Featuring a Ligand with Topologically Isolated p Orbitals. Inorganic Chemistry, 2021, 60, 17858-17864.	1.9	3
36	Influence of viscoelastic coatings on the contact of lubricated bodies. Russian Engineering Research, 2017, 37, 596-602.	0.2	2

#	Article	IF	Citations
37	Prediction of the lifetime of the elements of the safety and control rods of nuclear reactors. Soviet Atomic Energy, 1987, 62, 20-28.	0.1	1
38	A Semiconducting Cationic Squareâ€Grid Network with Fe III Centers Displaying Unusual Dynamic Behavior. European Journal of Inorganic Chemistry, 2020, 2020, 1255-1259.	1.0	1
39	Numerical Analysis of Transition Processes in a Viscoelastic Hydrodynamic Contact during Reverse Motion. Journal of Machinery Manufacture and Reliability, 2021, 50, 661-670.	0.1	1
40	Numerical Analysis of Lubrication Layer Characteristics in a Supporting Slider Bearing under Reverse Motion. Fluid Dynamics, 2018, 53, S14-S23.	0.2	0
41	Contact Problem of Viscoelastic Cylinder Rolling along a Viscoelastic Base with a Viscous Lubricant Layer. Mechanics of Solids, 2019, 54, 289-302.	0.3	0
42	NUMERICAL ANALYSIS OF TRANSIENT PROCESSESIN VISCOELASTIC HYDRODYNAMIC CONTACT UNDER RECIPROCATING MOTION. Problemy MaÅ¡inostroeniÃ¢ I Avtomatizacii, 2021, , 81-90.	0.0	0
43	Charge transfer in mixed and segregated stacks of tetrathiafulvalene, tetrathianaphthalene and naphthalene diimide: a structural, spectroscopic and computational study. New Journal of Chemistry, 0, , .	1.4	0