Alexander G Medvedev

List of Publications by Citations

53 papers	1,422 citations	17 h-index	37 g-index
61 ext. papers	1,607 ext. citations	5.1 avg, IF	4.39 L-index

#	Paper	IF	Citations
53	High-capacity antimony sulphide nanoparticle-decorated graphene composite as anode for sodium-ion batteries. *Nature Communications*, **2013**, 4, 2922	17.4	425
52	Nanocrystalline SnS coated onto reduced graphene oxide: demonstrating the feasibility of a non-graphitic anode with sulfide chemistry for potassium-ion batteries. *Chemical Communications*, **2017**, 53, 8272-8275	5.8	164
51	Nanocrystalline tin disulfide coating of reduced graphene oxide produced by the peroxostannate deposition route for sodium ion battery anodes. *Journal of Materials Chemistry A*, **2014**, 2, 8431	13	104
50	H-bond network in amino acid cocrystals with H2O or H2O2. The DFT study of serine-H2O and serine-H2O2. *Journal of Physical Chemistry A*, **2011**, 115, 13657-63	2.8	66
49	Zinc dioxide nanoparticulates: a hydrogen peroxide source at moderate pH. *Environmental Science & Technology*, **2013**, 47, 8769-74	10.3	52
48	Crystal structures of natural amino acid perhydrates. *CrystEngComm*, **2011**, 13, 2399	3.3	45
47	Peroxosolvates: Formation Criteria, H2O2 Hydrogen Bonding, and Isomorphism with the Corresponding Hydrates. *Crystal Growth and Design*, **2017**, 17, 214-220	3.5	42
46	GeO Thin Film Deposition on Graphene Oxide by the Hydrogen Peroxide Route: Evaluation for Lithium-Ion Battery Anode. *ACS Applied Materials & Interfaces*, **2017**, 9, 9152-9160	9.5	39
45	The formation of a peroxoantimonate thin film coating on graphene oxide (GO) and the influence of the GO on its transformation to antimony oxides and elemental antimony. *Carbon*, **2012**, 50, 5463-5471	10.4	39
44	Biocomposite based on reduced graphene oxide film modified with phenothiazone and flavin adenine dinucleotide-dependent glucose dehydrogenase for glucose sensing and biofuel cell applications. *Analytical Chemistry*, **2015**, 87, 9567-71	7.8	37
43	A model proton-transfer system in the condensed phase: NH4(+)OOH(-), a crystal with short intermolecular H-bonds. *Journal of Chemical Physics*, **2010**, 133, 164506	3.9	31
42	Potassium, Cesium, and Ammonium Peroxogermanates with Inorganic Hexanuclear Peroxo Bridged Germanium Anion Isolated from Aqueous Solution. *Inorganic Chemistry*, **2015**, 54, 8058-65	5.1	28
41	Graphene Oxide-Supported Tin Telluride Composite for Sodium- and Lithium-Ion Battery Anodes. *Energy Technology*, **2018**, 6, 127-133	3.5	26
40	Graphene oxide supported sodium stannate lithium ion battery anodes by the peroxide route: low temperature and no waste processing. *Journal of Materials Chemistry A*, **2015**, 3, 20681-20689	13	25
39	Synthesis of high volumetric capacity graphene oxide-supported tellurantimony Na- and Li-ion battery anodes by hydrogen peroxide sol gel processing. *Journal of Colloid and Interface Science*, **2018**, 512, 165-171	9.3	23
38	Preparation of pure hydrogen peroxide and anhydrous peroxide solutions from crystalline serine perhydrate. *Tetrahedron*, **2010**, 66, 5130-5133	2.4	21
37	Peroxide Coordination of Tellurium in Aqueous Solutions. *Chemistry - A European Journal*, **2016**, 22, 2980-88	4.8	19

36	The applicability of the dimeric heterosynthon concept to molecules with equivalent binding sites. A DFT study of crystalline urea·H2O2. *RSC Advances*, **2015**, 5, 29601-29608	3.7	17
35	Vanadium Oxide Thin Film Formation on Graphene Oxide by Microexplosive Decomposition of Ammonium Peroxovanadate and Its Application as a Sodium Ion Battery Anode. *Langmuir*, **2018**, 34, 2741-2747	4	16
34	Probing electrochemical reactivity in an Sb2S3-containing potassium-ion battery anode: observation of an increased capacity. *Journal of Materials Chemistry A*, **2020**, 8, 11424-11434	13	16
33	Hydrogen Peroxide Insular Dodecameric and Pentameric Clusters in Peroxosolvate Structures. *Angewandte Chemie - International Edition*, **2017**, 56, 15241-15245	16.4	15
32	Brush like polyaniline on vanadium oxide decorated reduced graphene oxide: Efficient electrode materials for supercapacitor. *Journal of Energy Storage*, **2019**, 22, 188-193	7.8	15
31	HO induced formation of graded composition sodium-doped tin dioxide and template-free synthesis of yolk-shell SnO particles and their sensing application. *Dalton Transactions*, **2017**, 46, 16171-16179	4.3	15
30	Antimony and antimony oxide@graphene oxide obtained by the peroxide route as anodes for lithium-ion batteries. *Main Group Metal Chemistry*, **2015**, 38,	1.6	14
29	Crystalline Peroxosolvates: Nature of the Coformer, Hydrogen-Bonded Networks and Clusters, Intermolecular Interactions. *Molecules*, **2020**, 26,	4.8	12
28	Effect of aluminum vacancies on the H2O2 or H2O interaction with a gamma-AlOOH surface. A solid-state DFT study. *International Journal of Quantum Chemistry*, **2019**, 119, e25920	2.1	11
27	Doubly Coated, Organic–Inorganic Paraffin Phase Change Materials: Zinc Oxide Coating of Hermetically Encapsulated Paraffins. *Advanced Materials Interfaces*, **2019**, 6, 1900368	4.6	10
26	Ammonium and caesium carbonate peroxosolvates: supramolecular networks formed by hydrogen bonds. *Acta Crystallographica Section C: Crystal Structure Communications*, **2012**, 68, i20-4		10
25	Green Synthesis of a Nanocrystalline Tin Disulfide-Reduced Graphene Oxide Anode from Ammonium Peroxostannate: a Highly Stable Sodium-Ion Battery Anode. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 5485-5494	8.3	9
24	Cyclic dipeptide peroxosolvates: first direct evidence for hydrogen bonding between hydrogen peroxide and a peptide backbone. *CrystEngComm*, **2019**, 21, 4961-4968	3.3	9
23	Enhanced Thermal Buffering of Phase Change Materials by the Intramicrocapsule Sub per Mille CNT Dopant. *ACS Applied Materials & Interfaces*, **2020**, 12, 16227-16235	9.5	8
22	Renewable zinc dioxide nanoparticles and coatings. *Materials Letters*, **2014**, 116, 282-285	3.3	8
21	Unusual Stabilization of Zinc Peroxide by Manganese Oxide: Mechanistic Understanding by Temperature-Dependent EPR Studies. *Journal of Physical Chemistry C*, **2019**, 123, 20884-20892	3.8	6
20	Crystal structures of pyridinemonocarboxylic acid peroxosolvates. *Russian Chemical Bulletin*, **2013**, 62, 1871-1876	1.7	6
19	Crystalline Ammonium Peroxogermanate as a Waste-Free, Fully Recyclable Versatile Precursor for Germanium Compounds. *Inorganic Chemistry*, **2019**, 58, 1905-1911	5.1	5

18	Hydrogen peroxide sol-gel coating of microencapsulated phase change materials by metal oxides. *Journal of Sol-Gel Science and Technology*, **2020**, 95, 649-660	2.3	5
17	Stabilization of hydrogen peroxide by hydrogen bonding in the crystal structure of 2-aminobenzimidazole perhydrate. *CrystEngComm*, **2020**, 22, 2866-2872	3.3	4
16	Study of tin dioxide–sodium stannate composite obtained by decomposition of peroxostannate as a potential anode material for lithium-ion batteries. *Russian Journal of Inorganic Chemistry*, **2016**, 61, 1430-1435	1.5	4
15	Crystal structure of ()--benzyl-idene-1-phenyl-methanamine oxide hydrogen peroxide monosolvate. *Acta Crystallographica Section E: Crystallographic Communications*, **2017**, 73, 1666-1669	0.7	4
14	Hydroperoxo double hydrogen bonding: stabilization of hydroperoxo complexes exemplified by triphenylsilicon and triphenylgermanium hydroperoxides. *CrystEngComm*, **2020**, 22, 1922-1928	3.3	3
13	Identification of Barium Hydroxo-Hydroperoxostannate Precursor for Low-Temperature Formation of Perovskite Barium Stannate. *Inorganic Chemistry*, **2020**, 59, 18358-18365	5.1	2
12	Crystal structure of ammonium succinate peroxosolvate. *Journal of Structural Chemistry*, **2014**, 55, 1390-1394	0.9	2
11	Comparison of Proton Acceptor and Proton Donor Properties of HO and HO in Organic Crystals of Drug-like Compounds: Peroxosolvates vs. Crystallohydrates.. *Molecules*, **2022**, 27,	4.8	2
10	Morphology and electrochemical properties of a composite produced by a peroxide method on the basis of tin dioxide and carbon black. *Russian Journal of Inorganic Chemistry*, **2016**, 61, 1578-1583	1.5	2
9	Hydrogen Peroxide Insular Dodecameric and Pentameric Clusters in Peroxosolvate Structures. *Angewandte Chemie*, **2017**, 129, 15443-15447	3.6	1
8	X-ray diffraction and DSC study of 4-n-butyloxyphenyl 4?-hydroxybenzoate. *Molecular Crystals and Liquid Crystals*, **2017**, 652, 76-83	0.5	1
7	Development of combined granulation and encapsulation process in production of sodium percarbonate. *Theoretical Foundations of Chemical Engineering*, **2017**, 51, 515-522	0.9	1
6	Green synthesis of zinc sulfide-reduced graphene oxide composite and its application in sodium-ion batteries. *Journal of Alloys and Compounds*, **2022**, 910, 164769	5.7	1
5	Novel peroxosolvates of tetraalkylammonium halides: the first case of layers containing hydrogen-bonded peroxide molecules. *CrystEngComm*, **2021**, 24, 38-42	3.3	0
4	The Crystal Structure of Guanidinium Sulphate Hemiperoxosolvate. *Propellants, Explosives, Pyrotechnics*, **2018**, 43, 859-861	1.7	0
3	Synthesis and crystal structure of triphenyltin and lead complexes with organic peroxides. *Mendeleev Communications*, **2022**, 32, 57-59	1.9	0
2	Titelbild: Hydrogen Peroxide Insular Dodecameric and Pentameric Clusters in Peroxosolvate Structures (Angew. Chem. 48/2017). *Angewandte Chemie*, **2017**, 129, 15365-15365	3.6	
1	Phase Change Materials: Doubly Coated, Organic–Inorganic Paraffin Phase Change Materials: Zinc Oxide Coating of Hermetically Encapsulated Paraffins (Adv. Mater. Interfaces 12/2019). *Advanced Materials Interfaces*, **2019**, 6, 1970077	4.6	