Srimanta Pakhira

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3587052/publications.pdf

Version: 2024-02-01

53 papers	1,517 citations	304368 22 h-index	329751 37 g-index
54 all docs	54 docs citations	54 times ranked	2022 citing authors

#	Article	IF	Citations
1	Pyrene-based fluorescent Ru(<scp>ii</scp>)-arene complexes for significant biological applications: catalytic potential, DNA/protein binding, two photon cell imaging and in vitro cytotoxicity. Dalton Transactions, 2022, 51, 3937-3953.	1.6	14
2	Hydrogen: A Future Chemical Fuel. Materials Horizons, 2022, , 1-30.	0.3	5
3	Electrochemical Water Splitting: H2 Evolution Reaction. Materials Horizons, 2022, , 59-89.	0.3	2
4	Efficient electrocatalytic H₂ evolution mediated by 2D Janus MoSSe transition metal dichalcogenide. Sustainable Energy and Fuels, 2022, 6, 1733-1752.	2.5	14
5	H₂physisorption on covalent organic framework linkers and metalated linkers: a strategy to enhance binding strength. Molecular Systems Design and Engineering, 2022, 7, 577-591.	1.7	7
6	Large and Uniform Single Crystals of MoS₂ Monolayers for ppb-Level NO₂ Sensing. ACS Applied Nano Materials, 2022, 5, 9415-9426.	2.4	44
7	Mechanism of electrochemical oxygen reduction reaction at two-dimensional Pt-doped MoSe₂ material: an efficient electrocatalyst. Journal of Materials Chemistry C, 2021, 9, 11331-11342.	2.7	27
8	Constructing a High-Performance Aqueous Rechargeable Zinc-Ion Battery Cathode with Self-Assembled Mat-like Packing of Intertwined Ag(I) Pre-Inserted V₃O₇Â·H₂O Microbelts with Reduced Graphene Oxide Core. ACS Sustainable Chemistry and Engineering, 2021, 9, 3985-3995.	3.2	40
9	Selective anticancer activities of ruthenium(II)-tetrazole complexes and their mechanistic insights. BioMetals, 2021, 34, 795-812.	1.8	6
10	Rapidly Reversible Organic Crystalline Switch for Conversion of Heat into Mechanical Energy. Journal of the American Chemical Society, 2021, 143, 5951-5957.	6.6	29
11	Recent advancements of two-dimensional transition metal dichalcogenides and their applications in electrocatalysis and energy storage. Emergent Materials, 2021, 4, 951-970.	3.2	24
12	Generation of emissive nanosphere from micro-aggregates in anionic perylene diimide: Co-relation of self-assembly, emission, and electrical properties. Dyes and Pigments, 2021, 192, 109461.	2.0	4
13	Tunability of the Electronic Properties of Covalent Organic Frameworks. ACS Applied Electronic Materials, 2021, 3, 720-732.	2.0	26
14	Low temperature activation of inert hexagonal boron nitride for metal deposition and single atom catalysis. Materials Today, 2021, 51, 108-116.	8.3	16
15	Unveiling the role of 2D monolayer Mn-doped MoS₂material: toward an efficient electrocatalyst for H₂evolution reaction. Physical Chemistry Chemical Physics, 2021, 24, 265-280.	1.3	21
16	Mechanistic Insight for Targeting Biomolecules by Ruthenium(II) NSAID Complexes. ACS Applied Bio Materials, 2020, 3, 4600-4612.	2.3	11
17	Catalyzing the Intercalation Storage Capacity of Aqueous Zinc-Ion Battery Constructed with Zn(II) Preinserted Organo-Vanadyl Hybrid Cathode. ACS Applied Energy Materials, 2020, 3, 3425-3434.	2.5	27
18	Quantum Nature in the Interaction of Molecular Hydrogen with Porous Materials: Implications for Practical Hydrogen Storage. Journal of Physical Chemistry C, 2020, 124, 6454-6460.	1.5	12

#	Article	IF	Citations
19	Substituents Effects of Organic Linkers on Rotational Energy Barriers in Metalâ€Organic Frameworks. ChemistrySelect, 2019, 4, 8584-8592.	0.7	14
20	Energy framework approach to the supramolecular reactions: interplay of the secondary bonding interaction in Ph₂E₂(E = Se, Te)/p-I-C₆F₄-I co-crystals. New Journal of Chemistry, 2019, 43, 7941-7949.	1.4	22
21	Intercalation of first row transition metals inside covalent-organic frameworks (COFs): a strategy to fine tune the electronic properties of porous crystalline materials. Physical Chemistry Chemical Physics, 2019, 21, 8785-8796.	1.3	28
22	Raman and electrical transport properties of few-layered arsenic-doped black phosphorus. Nanoscale, 2019, 11, 18449-18463.	2.8	27
23	Rotational dynamics of the organic bridging linkers in metalâ€“organic frameworks and their substituent effects on the rotational energy barrier. RSC Advances, 2019, 9, 38137-38147.	1.7	24
24	S-Doped MoP Nanoporous Layer Toward High-Efficiency Hydrogen Evolution in pH-Universal Electrolyte. ACS Catalysis, 2019, 9, 651-659.	5.5	167
25	Synthesis and Characterization of Tris-chelate Complexes for Understanding f-Orbital Bonding in Later Actinides. Journal of the American Chemical Society, 2019, 141, 2356-2366.	6.6	41
26	Demystifying the Mechanism of Regio- and Isoselective Epoxide Polymerization Using the Vandenberg Catalyst. Macromolecules, 2018, 51, 1777-1786.	2.2	26
27	Apically Dominant Mechanism for Improving Catalytic Activities of Nâ€Doped Carbon Nanotube Arrays in Rechargeable Zincâ€“Air Battery. Advanced Energy Materials, 2018, 8, 1800480.	10.2	153
28	Modulating Electrocatalysis on Graphene Heterostructures: Physically Impermeable Yet Electronically Transparent Electrodes. ACS Nano, 2018, 12, 2980-2990.	7.3	45
29	Dirac cone in two dimensional bilayer graphene by intercalation with V, Nb, and Ta transition metals. Journal of Chemical Physics, 2018, 148, 064707.	1.2	20
30	Tuning the Dirac Cone of Bilayer and Bulk Structure Graphene by Intercalating First Row Transition Metals Using First-Principles Calculations. Journal of Physical Chemistry C, 2018, 122, 4768-4782.	1.5	30
31	Binderâ€Free ZnO Cathode synthesized via ALD by Direct Growth of Hierarchical ZnO Nanostructure on Current Collector for Highâ€Performance Rechargeable Aluminiumâ€Ion Batteries. ChemistrySelect, 2018, 3, 12512-12523.	0.7	14
32	Achieving Fast and Efficient K⁺ Intercalation on Ultrathin Graphene Electrodes Modified by a Li⁺ Based Solid-Electrolyte Interphase. Journal of the American Chemical Society, 2018, 140, 13599-13603.	6.6	54
33	Reaction mechanism of the selective reduction of CO₂ to CO by a tetraaza [Co^{II}N₄H]²⁺ complex in the presence of protons. Physical Chemistry Chemical Physics, 2018, 20, 24058-24064.	1.3	15
34	Hybridization of Co₃O₄ and Î±-MnO₂ Nanostructures for High-Performance Nonenzymatic Glucose Sensing. ACS Sustainable Chemistry and Engineering, 2018, 6, 13248-13261.	3.2	54
35	Low-temperature Synthesis of Heterostructures of Transition Metal Dichalcogenide Alloys (W_xMo_{1â€“x}S₂) and Graphene with Superior Catalytic Performance for Hydrogen Evolution. ACS Nano, 2017, 11, 5103-5112.	7.3	157
36	Iron Intercalation in Covalentâ€“Organic Frameworks: A Promising Approach for Semiconductors. Journal of Physical Chemistry C, 2017, 121, 21160-21170.	1.5	46

#	Article	IF	Citations
37	Quantum Monte Carlo Study of the Reactions of CH with Acrolein: Major and Minor Channels. Journal of Physical Chemistry A, 2016, 120, 3602-3612.	1.1	21
38	Interactions between metal cations with H2 in the M+- H2 complexes: Performance of DFT and DFT-D methods. Journal of Chemical Sciences, 2016, 128, 621-631.	0.7	16
39	Diverse Rotational Flexibility of Substituted Dicarboxylate Ligands in Functional Porous Coordination Polymers. Journal of Physical Chemistry C, 2015, 119, 28789-28799.	1.5	31
40	Control of Diffusion and Conformation Behavior of Methyl Methacrylate Monomer by Phenylene Fin in Porous Coordination Polymers. Journal of Physical Chemistry C, 2015, 119, 27291-27297.	1.5	10
41	A Quantum Monte Carlo Study of the Reactions of CH with Acrolein. Journal of Physical Chemistry A, 2015, 119, 4214-4223.	1.1	28
42	Theoretical study of efficiency of metal cations (Mg⁺, Ca⁺, and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 542 Td	0.8	8
43	Association reaction between SiH3 and H2O2: a computational study of the reaction mechanism and kinetics. Theoretical Chemistry Accounts, 2013, 132, 1.	0.5	7
44	Binding affinity of substituted ureidoâ€benzenesulfonamide ligands to the carbonic anhydrase receptor: A theoretical study of enzyme inhibition. Journal of Computational Chemistry, 2013, 34, 1907-1916.	1.5	5
45	Performance of dispersion-corrected double hybrid density functional theory: A computational study of OCS-hydrocarbon van der Waals complexes. Journal of Chemical Physics, 2013, 138, 164319.	1.2	25
46	Structure, stability, and dissociation of small ionic silicon oxide clusters [SiOn+(n = 3, 4)]: Insight from density functional and topological exploration. Journal of Chemical Physics, 2013, 139, 234303.	1.2	7
47	Dispersion corrected double high-hybrid and gradient-corrected density functional theory study of light cationâ€“dihydrogen (M+â€“H2, where MÂ=ÂLi, Na, B and Al) van der Waals complexes. Structural Chemistry, 2013, 24, 549-558.	1.0	16
48	A Computational Study of Detoxification of Lewisite Warfare Agents by British Anti-lewisite: Catalytic Effects of Water and Ammonia on Reaction Mechanism and Kinetics. Journal of Physical Chemistry A, 2013, 117, 3496-3506.	1.1	19
49	Can two T-shaped isomers of OCSâ€“C2H2 van der Waals complex exist?. Chemical Physics Letters, 2012, 549, 6-11.	1.2	16
50	Theoretical study of spectroscopy, interaction, and dissociation of linear and T-shaped isomers of RgClF (RgÂ=ÂHe, Ne, and Ar) van der Waals complexes. Structural Chemistry, 2012, 23, 681-692.	1.0	8
51	Coupled cluster study of structural properties of RgI and RgIâ¯ (RgÂ=ÂHe, Ne, Ar) weakly bound molecules. Structural Chemistry, 2011, 22, 893-900.	1.0	5
52	Spectroscopy and dissociation of I2â€“Rg (RgÂ=ÂKr and Xe) van der Waals complexes. Theoretical Chemistry Accounts, 2011, 130, 95-101.	0.5	14
53	Spectroscopic properties of I2â€“Rg (Rg=He, Ne, Ar) van der Waals complexes. Chemical Physics Letters, 2011, 505, 81-86.	1.2	15