Emilia Olsson

List of Publications by Year
in descending order

35 papers	1,055 citations	471371 17 h-index	434063 31 g-index
36 all docs	36 docs citations	36 times ranked	1194 citing authors

#	Article	IF	Citations
1	Elucidation of the Solid Electrolyte Interphase Formation Mechanism in Microâ€Mesoporous Hardâ€Carbon Anodes. Advanced Materials Interfaces, 2022, 9, 2101267.	1.9	18
2	Voltage plateau variation in a bismuth-potassium battery. Journal of Materials Chemistry A, 2022, 10, 2917-2923.	5.2	6
3	Elucidation of the Solid Electrolyte Interphase Formation Mechanism in Microâ€Mesoporous Hardâ€Carbon Anodes (Adv. Mater. Interfaces 8/2022). Advanced Materials Interfaces, 2022, 9, .	1.9	0
4	Xenon Ion Implantation Induced Surface Compressive Stress for Preventing Dendrite Penetration in Solidâ€State Electrolytes. Small, 2022, 18, e2108124.	5.2	8
5	Introducing 4sâ€“2p Orbital Hybridization to Stabilize Spinel Oxide Cathodes for Lithiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2022, 61, .	7.2	26
6	Introducing 4sâ€“2p Orbital Hybridization to Stabilize Spinel Oxide Cathodes for Lithiumâ€Ion Batteries. Angewandte Chemie, 2022, 134, .	1.6	12
7	Atomicâ€Scale Design of Anode Materials for Alkali Metal (Li/Na/K)â€Ion Batteries: Progress and Perspectives. Advanced Energy Materials, 2022, 12, .	10.2	56
8	A novel amorphous P₄SSe₂compound as an advanced anode for sodium-ion batteries in ether-based electrolytes. Journal of Materials Chemistry A, 2021, 9, 12029-12040.	5.2	21
9	Defects in Hard Carbon: Where Are They Located and How Does the Location Affect Alkaline Metal Storage?. Small, 2021, 17, e2007652.	5.2	28
10	Investigating the effect of edge and basal plane surface functionalisation of carbonaceous anodes for alkali metal (Li/Na/K) ion batteries. Carbon, 2021, 177, 226-243.	5.4	19
11	Prediction of the Liquidâ€“Liquid Extraction Properties of Imidazolium-Based Ionic Liquids for the Extraction of Aromatics from Aliphatics. Journal of Chemical Information and Modeling, 2021, 61, 3376-3385.	2.5	8
12	Combined density functional theory and molecular dynamics study of Sm_{0.75}A_{0.25}Co_{1â^'x}Mn_xO_{2.88} (A = Ca, Sr;) Tj ETQq0 0 0 rgBT /Overl Chemical Physics, 2020, 22, 692-699.	1.3	10
13	Local mobility in electrochemically inactive sodium in hard carbon anodes after the first cycle. Journal of Materials Chemistry A, 2020, 8, 743-749.	5.2	28
14	A revised mechanistic model for sodium insertion in hard carbons. Energy and Environmental Science, 2020, 13, 3469-3479.	15.6	195
15	Sodium Storage Mechanism Investigations through Structural Changes in Hard Carbons. ACS Applied Energy Materials, 2020, 3, 9918-9927.	2.5	56
16	Lithiumâ€“Sulfur Batteries: Molecularâ€Level Design of Pyrrhotite Electrocatalyst Decorated Hierarchical Porous Carbon Spheres as Nanoreactors for Lithiumâ€“Sulfur Batteries (Adv. Energy) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.2	1
17	Synthesis and Electrochemical Properties of Bi2MoO6/Carbon Anode for Lithium-Ion Battery Application. Materials, 2020, 13, 1132.	1.3	16
18	The adsorption and migration behavior of divalent metals (Mg, Ca, and Zn) on pristine and defective graphene. Carbon, 2020, 163, 276-287.	5.4	36

#	Article	IF	Citations
19	Elucidating the Effect of Planar Graphitic Layers and Cylindrical Pores on the Storage and Diffusion of Li, Na, and K in Carbon Materials. Advanced Functional Materials, 2020, 30, 1908209.	7.8	49
20	Synthesis of Bi2S3/carbon nanocomposites as anode materials for lithium-ion batteries. Journal of Materials Science and Technology, 2020, 50, 92-102.	5.6	35
21	Functionalized Two-Dimensional Nanoporous Graphene as Efficient Global Anode Materials for Li-, Na-, K-, Mg-, and Ca-Ion Batteries. Journal of Physical Chemistry C, 2020, 124, 9734-9745.	1.5	28
22	Molecularâ€Level Design of Pyrrhotite Electrocatalyst Decorated Hierarchical Porous Carbon Spheres as Nanoreactors for Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2020, 10, 2000651.	10.2	101
23	Atomic Scale Insight into Metal Storage and Migration in Novel Anode Materials for Next Generation Battery Technologies. ECS Meeting Abstracts, 2020, MA2020-02, 350-350.	0.0	0
24	Alkali Ion Storage and Migration in Carbonaceous Anode Materials â€“ an Atomic Scale Study. ECS Meeting Abstracts, 2020, MA2020-02, 113-113.	0.0	0
25	Hard Carbon Ethylene Carbonate Interfaces â€“ Atomic Scale Insight into Surface Termination, Defects, Functional Groups, and Roughness on Electrolyte Breakdown, Metal Adsorption, Intercalation and Nucleation. ECS Meeting Abstracts, 2020, MA2020-02, 816-816.	0.0	0
26	Structural, elastic, vibrational and electronic properties of amorphous Sm2O3 from Ab Initio calculations. Computational Materials Science, 2019, 169, 109119.	1.4	10
27	Modeling of Diffusion and Incorporation of Interstitial Oxygen Ions at the TiN/SiO₂ Interface. ACS Applied Materials & Interfaces, 2019, 11, 36232-36243.	4.0	9
28	Computational study of the mixed B-site perovskite SmB_xCo_{1â”x}O_{3â”d} (B = Mn, Fe, Ni, Cu) for next generation solid oxide fuel cell cathodes. Physical Chemistry Chemical Physics, 2019, 21, 9407-9418.	1.3	20
29	Adsorption and migration of alkali metals (Li, Na, and K) on pristine and defective graphene surfaces. Nanoscale, 2019, 11, 5274-5284.	2.8	149
30	Theoretical Insights of Ni₂P (0001) Surface toward Its Potential Applicability in CO₂ Conversion via Dry Reforming of Methane. ACS Catalysis, 2019, 9, 3487-3497.	5.5	36
31	Carbon-Based Anode Materials for Alkali Metal Ion Batteries â€“ Atomic Scale Studies of Defects, Functional Groups, and Electrolytes and Their Impact on Metal Storage and Diffusion. ECS Meeting Abstracts, 2019, , .	0.0	0
32	A computational study of the electronic properties, ionic conduction, and thermal expansion of Sm_{1â”x}A_xCoO₃and Sm_{1â”x}A_xCoO_{3â”x/2}(A = Ba²⁺, Ca²⁺,) Tj ETQq0 0 0 rgBT /Overlock 1 Chemical Physics, 2017, 19, 13960-13969.	1.3	10
33	Publisherâ€™s Note: â€œAb initio study of vacancy formation in cubic LaMnO3 and SmCoO3 as cathode materials in solid oxide fuel cellsâ€•[J. Chem. Phys. 145, 014703 (2016)]. Journal of Chemical Physics, 2016, 145, 199901.	1.2	2
34	A DFT+U study of the structural, electronic, magnetic, and mechanical properties of cubic and orthorhombic SmCoO3. Journal of Chemical Physics, 2016, 145, 224704.	1.2	15
35	Ab initio study of vacancy formation in cubic LaMnO3 and SmCoO3 as cathode materials in solid oxide fuel cells. Journal of Chemical Physics, 2016, 145, 014703.	1.2	25