Marton Voros

List of Publications by Year in descending order

46 papers	1,886 citations	318942 23 h-index	299063 42 g-index
47 all docs	47 docs citations	47 times ranked	3916 citing authors

#	Article	IF	Citations
1	DMRG on Top of Plane-Wave Kohnâ€“Sham Orbitals: A Case Study of Defected Boron Nitride. Journal of Chemical Theory and Computation, 2021, 17, 1143-1154.	2.3	16
2	Commensuration effects in layered nanoparticle solids. Physical Review B, 2020, 101, .	1.1	2
3	A Longâ€Cycleâ€Life Lithiumâ€“CO₂ Battery with Carbon Neutrality. Advanced Materials, 2019, 31, e1902518.	11.1	138
4	Designing Janus Ligand Shells on PbS Quantum Dots using Ligandâ€“Ligand Cooperativity. ACS Nano, 2019, 13, 3839-3846.	7.3	23
5	New Class of Electrocatalysts Based on 2D Transition Metal Dichalcogenides in Ionic Liquid. Advanced Materials, 2019, 31, e1804453.	11.1	43
6	Excitations Partition into Two Distinct Populations in Bulk Perovskites. Advanced Optical Materials, 2018, 6, 1700975.	3.6	8
7	Emergent Electronic and Dielectric Properties of Interacting Nanoparticles at Finite Temperature. Nano Letters, 2018, 18, 255-261.	4.5	5
8	Enhanced Multiple Exciton Generation in PbS | CdS Janus-like Heterostructured Nanocrystals. ACS Nano, 2018, 12, 10084-10094.	7.3	56
9	Strain-Driven Mn-Reorganization in Overlithiated Li_xMn₂O₄ Epitaxial Thin-Film Electrodes. ACS Applied Energy Materials, 2018, 1, 2526-2535.	2.5	18
10	Optical Absorbance Enhancement in PbS QD/Cinnamate Ligand Complexes. Journal of Physical Chemistry Letters, 2018, 9, 3425-3433.	2.1	36
11	Jahn-Teller Distortion and Disproportionation in Spinel Lithium Manganese Oxides from First Principles. ECS Meeting Abstracts, 2018, , .	0.0	0
12	Defect States and Charge Transport in Quantum Dot Solids. Chemistry of Materials, 2017, 29, 1255-1262.	3.2	33
13	Characterization of NiFe oxyhydroxide electrocatalysts by integrated electronic structure calculations and spectroelectrochemistry. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 3050-3055.	3.3	175
14	Charge Transport in Nanostructured Materials: Implementation and Verification of Constrained Density Functional Theory. Journal of Chemical Theory and Computation, 2017, 13, 2581-2590.	2.3	33
15	Tuning colloidal quantum dot band edge positions through solution-phase surface chemistry modification. Nature Communications, 2017, 8, 15257.	5.8	230
16	Performance and Self-Consistency of the Generalized Dielectric Dependent Hybrid Functional. Journal of Chemical Theory and Computation, 2017, 13, 3318-3325.	2.3	33
17	Design of Heterogeneous Chalcogenide Nanostructures with Pressure-Tunable Gaps and without Electronic Trap States. Nano Letters, 2017, 17, 2547-2553.	4.5	8
18	Metal-Insulator Transition in Nanoparticle Solids: Insights from Kinetic Monte Carlo Simulations. Scientific Reports, 2017, 7, 7071.	1.6	13

#	Article	IF	Citations
19	Hydrogen Treatment as a Detergent of Electronic Trap States in Lead Chalcogenide Nanoparticles. Chemistry of Materials, 2017, 29, 2485-2493.	3.2	14
20	Electronâ€“vibration coupling induced renormalization in the photoemission spectrum of diamondoids. Nature Communications, 2016, 7, 11327.	5.8	45
21	Novel silicon phases and nanostructures for solar energy conversion. Applied Physics Reviews, 2016, 3, .	5.5	68
22	Metal-insulator transition in nanoparticle solar cells. , 2016, , .		0
23	Generalization of Dielectric-Dependent Hybrid Functionals to Finite Systems. Physical Review X, 2016, 6, .	2.8	49
24	Colloidal nanoparticles for Intermediate Band solar cells. , 2015, , .		0
25	Surface dangling bonds are a cause of B-type blinking in Si nanoparticles. Nanoscale, 2015, 7, 3737-3744.	2.8	39
26	Colloidal Nanoparticles for Intermediate Band Solar Cells. ACS Nano, 2015, 9, 6882-6890.	7.3	37
27	Electronic and optical properties of pure and modified diamondoids studied by many-body perturbation theory and time-dependent density functional theory. Journal of Chemical Physics, 2014, 141, 064308.	1.2	28
28	Exotic phase Si nanoparticles and Si-ZnS nanocomposites: New paradigms to improve the efficiency of MEG solar cells. , 2014, , .		0
29	Molecular-sized fluorescent nanodiamonds. Nature Nanotechnology, 2014, 9, 54-58.	15.6	229
30	Hierarchical modeling of electron and hole transport in nanoparticle thin films: From ab initio to Monte Carlo. , 2014, , .		0
31	Germanium nanoparticles with non-diamond core structures for solar energy conversion. Journal of Materials Chemistry A, 2014, 2, 9820.	5.2	29
32	Solar Nanocomposites with Complementary Charge Extraction Pathways for Electrons and Holes: Si Embedded in ZnS. Physical Review Letters, 2014, 112, 106801.	2.9	22
33	Ab Initio Optoelectronic Properties of Silicon Nanoparticles: Excitation Energies, Sum Rules, and Tammâ€“Dancoff Approximation. Journal of Chemical Theory and Computation, 2014, 10, 3290-3298.	2.3	22
34	Increasing impact ionization rates in Si nanoparticles through surface engineering: A density functional study. Physical Review B, 2013, 87, .	1.1	24
35	Optically Controlled Switching of the Charge State of a Single Nitrogen-Vacancy Center in Diamond at Cryogenic Temperatures. Physical Review Letters, 2013, 110, 167402.	2.9	179
36	Electronic and Optical Properties of Silicon Carbide Nanotubes and Nanoparticles Studied by Density Functional Theory Calculations: Effect of Doping and Environment. Journal of Computational and Theoretical Nanoscience, 2012, 9, 1906-1940.	0.4	4

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37	Tuning the Optical Gap of Nanometer-Size Diamond Cages by Sulfurization: A Time-Dependent Density Functional Study. Physical Review Letters, 2012, 108, 267401.	2.9	41
38	Identification of defects at the interface between 3Câ€šSiC quantum dots and a SiO₂ embedding matrix. Physica Status Solidi (B): Basic Research, 2012, 249, 360-367.	0.7	6
39	Time-Dependent Density Functional Calculations on Hydrogenated Silicon Carbide Nanocrystals. Materials Science Forum, 2011, 679-680, 516-519.	0.3	2
40	The Absorption of Diamondoids from Time-dependent Density Functional Calculations. Materials Research Society Symposia Proceedings, 2011, 1370, 23.	0.1	2
41	Influence of Oxygen on the Absorption of Silicon Carbide Nanoparticles. Materials Science Forum, 2011, 679-680, 520-523.	0.3	3
42	The absorption spectrum of hydrogenated silicon carbide nanocrystals from ab initio calculations. Applied Physics Letters, 2010, 96, 051909.	1.5	37
43	Annealing simulations to determine the matrix interface structure of SiC quantum dots embedded in SiO₂. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 407-410.	0.8	2
44	The absorption of oxygenated silicon carbide nanoparticles. Journal of Chemical Physics, 2010, 133, 064705.	1.2	36
45	Optical absorption of diamond nanocrystals fromab initiodensity-functional calculations. Physical Review B, 2009, 80, .	1.1	56
46	High-Energy Excitations in Silicon Nanoparticles. Nano Letters, 2009, 9, 3780-3785.	4.5	41