Guntars Zvejnieks

List of Publications by Year
in descending order

36	241	1040056 9	1058476 14
papers	citations	h-index	g-index

36	36	36	226
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Stochastization as a possible cause for fast reconnection during MHD mode activity in the ASDEX Upgrade tokamak. Nuclear Fusion, 2006, 46, 741-751.	3.5	28
2	Ab initio calculations of structural, electronic and vibrational properties of BaTiO3 and SrTiO3 perovskite crystals with oxygen vacancies. Low Temperature Physics, 2020, 46, 1185-1195.	0.6	26
3	Monte Carlo simulations for a Lotka-type model with reactant surface diffusion and interactions. Physical Review E, 2001, 63, 051104.	2.1	19
4	Theoretical and Experimental Study of (Ba,Sr)TiO₃ Perovskite Solid Solutions and BaTiO₃/SrTiO₃ Heterostructures. Journal of Physical Chemistry C, 2019, 123, 2031-2036.	3.1	18
5	Ab initio simulation of (Ba,Sr)TiO3 and (Ba,Ca)TiO3 perovskite solid solutions. Solid State Ionics, 2019, 337, 76-81.	2.7	13
6	Electromechanical Properties of Ba_(1â€“x)Sr_xTiO₃ Perovskite Solid Solutions from First-Principles Calculations. Journal of Physical Chemistry A, 2017, 121, 9409-9414.	2.5	11
7	Autoregressive moving average model for analyzing edge localized mode time series on Axially Symmetric Divertor Experiment (ASDEX) Upgrade tokamak. Physics of Plasmas, 2004, 11, 5658-5667.	1.9	10
8	Manifestation of dipole-induced disorder in self-assembly of ferroelectric and ferromagnetic nanocubes. Nanoscale, 2019, 11, 7293-7303.	5.6	10
9	Surface phase transitions at O and CO catalytic reaction on Pd(111). Catalysis Today, 2006, 116, 62-68.	4.4	9
10	Atomic and electronic structure of both perfect and nanostructured Ni(111) surfaces: First-principles calculations. Thin Solid Films, 2011, 519, 3745-3751.	1.8	9
11	Interface-induced enhancement of piezoelectricity in the (SrTiO₃)_m/(BaTiO₃)_{Mâˆ’m} superlattice for energy harvesting applications. Physical Chemistry Chemical Physics, 2019, 21, 23541-23551.	2.8	9
12	Microscopic approach to the kinetics of pattern formation of charged molecules on surfaces. Physical Review E, 2010, 82, 021602.	2.1	8
13	Water Splitting on Multifaceted SrTiO3 Nanocrystals: Computational Study. Catalysts, 2021, 11, 1326.	3.5	7
14	Were the chaotic ELMs in TCV the result of an ARMA process?. Plasma Physics and Controlled Fusion, 2004, 46, L15-L21.	2.1	6
15	Effects of pressure, temperature and atomic exchanges on phase separation dynamics in Au/Ni(111) surface alloy: Kinetic Monte Carlo study. Journal of Alloys and Compounds, 2015, 649, 313-319.	5.5	6
16	Void lattice formation in electron irradiated CaF 2 : Statistical analysis of experimental data and cellular automata simulations. Nuclear Instruments & Methods in Physics Research B, 2016, 368, 138-143.	1.4	6
17	Modelling of phase transitions and reaction at CO adsorption on oxygen precovered Pd(111). Applied Surface Science, 2006, 252, 5395-5398.	6.1	5
18	Pattern Formation Kinetics for Charged Molecules on Surfaces: Microscopic Correlation Function Analysis. Journal of Physical Chemistry B, 2011, 115, 14626-14633.	2.6	5

#	Article	IF	Citations
19	Atomistic theory of mesoscopic pattern formation induced by bimolecular surface reactions between oppositely charged molecules. Journal of Chemical Physics, 2011, 135, 224503.	3.0	5
20	Theory of non-equilibrium critical phenomena in three-dimensional condensed systems of charged mobile nanoparticles. Physical Chemistry Chemical Physics, 2014, 16, 13974-13983.	2.8	5
21	Void superlattice formation in electron irradiated CaF2: Theoretical analysis. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 3055-3058.	1.4	4
22	Kinetic Monte Carlo modeling of reaction-induced phase separation in Au/Ni(111) surface alloy. Surface and Coatings Technology, 2014, 255, 15-21.	4.8	4
23	BaCoO3 monoclinic structure and chemical bonding analysis: hybrid DFT calculations. Physical Chemistry Chemical Physics, 2021, 23, 17493-17501.	2.8	4
24	Monte Carlo simulations of the periodically forced autocatalyticA+Bâ†'2Breaction. Physical Review E, 2000, 61, 4593-4598.	2.1	3
25	Statistical characterization of selfâ€assembled charged nanoparticle structures. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 288-293.	1.8	3
26	Reply to â€œComment on â€˜Monte Carlo simulations for a Lotka-type model with reactant surface diffusion and interactionsâ€™ â€• Physical Review E, 2002, 65, 033102.	2.1	2
27	Model of the catalyticA+Bâ†'0reaction with surface reconstruction. Physical Review E, 2002, 66, 021109.	2.1	2
28	The kinetic MC modelling of reversible pattern formation in initial stages of thin metallic film growth on crystalline substrates. Solid State Communications, 2003, 125, 463-467.	1.9	2
29	Quantum chemical study of electron-phonon interaction in crystals. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 705-708.	0.8	2
30	The Diffusion-Controlled Energy Transfer Rate for a Paired Sink Distribution and Donor-Acceptor Interaction. Physica Status Solidi (B): Basic Research, 1997, 201, 339-342.	1.5	0
31	The effect of the particle generation function on the rate of the diffusion-controlled A + B â†' B reaction with a permanent particle source. Chemical Physics Letters, 1997, 270, 229-233.	2.6	0
32	Simulation of oxidized silicon stripe formation on Pd(111). Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 2731-2733.	0.8	0
33	Kinetic Monte Carlo modeling of Y2O3 nano-cluster formation in radiation resistant matrices. Nuclear Instruments & Methods in Physics Research B, 2018, 434, 13-22.	1.4	0
34	Simulation of Reaction-Induced Phase Separation in Surface Alloy. Acta Physica Polonica A, 2008, 113, 1099-1102.	0.5	0
35	Single oxygen vacancy in BaCoO3: Hybrid DFT calculations and local site symmetry approach. Solid State Ionics, 2022, 375, 115835.	2.7	0
36	Oxygen Vacancy Formation and Migration within the Antiphase Boundaries in Lanthanum Scandate-Based Oxides: Computational Study. Materials, 2022, 15, 2695.	2.9	0