Dung di Caprio

List of Publications by Year
in descending order

69 papers	795 citations	471509 17 h-index	580821 25 g-index
71 all docs	71 docs citations	71 times ranked	502 citing authors

#	Article	IF	Citations
1	Soft core fluid with competing interactions at a hard wall. Journal of Molecular Liquids, 2022, , 119652.	4.9	0
2	Charge and electric field distributions in the interelectrode region of an inhomogeneous solid electrolyte. Condensed Matter Physics, 2022, 25, 23501.	0.7	0
3	Cathodic control using cellular automata approach. Materials and Corrosion - Werkstoffe Und Korrosion, 2022, 73, 1631-1643.	1.5	5
4	Intergranular corrosion in evolving media: Experiment and modeling by cellular automata. Corrosion Science, 2022, 205, 110457.	6.6	5
5	Influence of the grid cell geometry on 3D cellular automata behavior in intergranular corrosion. Journal of Computational Science, 2021, 53, 101322.	2.9	7
6	Intergranular corrosion: Comparison between experiments and cellular automata. Corrosion Science, 2020, 177, 108953.	6.6	15
7	The effect of short-range interaction and correlations on the charge and electric field distribution in a model solid electrolyte. Solid State Ionics, 2019, 335, 156-163.	2.7	4
8	Accurate evaluations of both porosity and tortuosity of anodic films grown on rolled AA 1050 and on rolled or machined AA 2024 T3. Surface and Interface Analysis, 2019, 51, 1184-1193.	1.8	7
9	3D simulations of the metal passivation process in potentiostatic conditions using discrete lattice gas automaton. Electrochimica Acta, 2019, 295, 173-180.	5.2	5
10	Lattice fluid with attractive interaction between nearest neighbors and repulsive interaction between next-next-nearest neighbors on simple cubic lattice. Journal of the Belarusian State University Physics, 2019, , 84-95.	0.2	2
11	Distribution of electropotential in the electrode area of a solid state ion electrolyte. Journal of the Belarusian State University Physics, 2019, , 73-83.	0.2	0
12	The system of mobile ions in lattice models: Screening effects, thermodynamic and electrophysical properties. Journal of Molecular Liquids, 2018, 270, 183-190.	4.9	6
13	Effect of Adsorbate Diffusion on the Dendritic Morphology of Electrodeposited Films. Journal of Physical Chemistry C, 2018, 122, 21418-21432.	3.1	8
14	Pitting corrosion modelling by means of a stochastic cellular automata-based model. Corrosion Engineering Science and Technology, 2017, 52, 605-610.	1.4	12
15	Crossover from compact to branched films in electrodeposition with surface diffusion. Physical Review E, 2017, 96, 022805.	2.1	10
16	Probabilistic cellular automata model of generalised corrosion, transition to localised corrosion. Corrosion Engineering Science and Technology, 2017, 52, 186-193.	1.4	12
17	Oscillating Yukawa fluid at a hard wall: field theory description. Molecular Physics, 2016, 114, 2500-2515.	1.7	4
18	3D cellular automata simulations of intra and intergranular corrosion. Corrosion Science, 2016, 112, 438-450.	6.6	41

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19	Three dimensional discrete stochastic model of occluded corrosion cell. Corrosion Science, 2016, 111, 230-241.	6.6	32
20	3D simulations of ordered nanopore growth in alumina. Electrochimica Acta, 2016, 188, 218-221.	5.2	4
21	Transition from compact to porous films in deposition with temperature-activated diffusion. Physical Review E, 2015, 92, 012402.	2.1	1
22	Contact theorems for anisotropic fluids near a hard wall. Journal of Chemical Physics, 2015, 142, 014705.	3.0	2
23	Two-Yukawa fluid at a hard wall: Field theory treatment. Journal of Chemical Physics, 2015, 142, 194708.	3.0	4
24	Cyclic voltammetry simulations with cellular automata. Journal of Computational Science, 2015, 11, 269-278.	2.9	17
25	Cellular automata model of anodization. Journal of Computational Science, 2015, 11, 309-316.	2.9	4
26	In memory of Eduard Vakarin. Condensed Matter Physics, 2015, 18, 37002.	0.7	0
27	Crossover from anomalous to normal diffusion in porous media. Physical Review E, 2014, 89, 062126.	2.1	11
28	Cellular automata modeling of Scanning Electrochemical Microscopy (SECM) experiments. Electrochimica Acta, 2014, 145, 314-318.	5.2	4
29	Cellular Automata Based Approach to Corrosion and Passivity Related Phenomena. , 2014, , .		2
30	Overview of Cellular Automaton Models for Corrosion. Lecture Notes in Computer Science, 2014, , 187-196.	1.3	7
31	Corrosion-passivation processes in a cellular automata based simulation study. Journal of Supercomputing, 2013, 65, 697-709.	3.6	35
32	Maierâ€"Saupe nematogenic fluid interacting with an isotropic and an anisotropic Yukawa potentials: field theory description. Molecular Physics, 2013, 111, 1023-1041.	1.7	2
33	Cellular automata approach to corrosion and passivity phenomena. Pure and Applied Chemistry, 2012, 85, 247-256.	1.9	14
34	Modeling Growth of Organized Nanoporous Structures by Anodic Oxidation. Langmuir, 2012, 28, 13034-13041.	3.5	10
35	Interfacial properties of mercury/ethylammonium nitrate ionic liquid + water system: Electrocapillarity, surface charge and differential capacitance. Electrochimica Acta, 2012, 61, 207-215.	5.2	19
36	Yukawa fluid at a hard wall: field theory description. Molecular Physics, 2011, 109, 695-708.	1.7	11

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37	Morphology of corroded surfaces: Contribution of cellular automaton modelling. Corrosion Science, 2011, 53, 418-425.	6.6	56
38	The role of adsorption in passivation phenomena modelled by discrete lattice gas automata. Electrochimica Acta, 2011, 56, 3963-3968.	5.2	17
39	Cellular automata approach for morphological evolution of localised corrosion. Corrosion Engineering Science and Technology, 2011, 46, 223-227.	1.4	10
40	Simulations of passivation phenomena based on discrete lattice gas automata. Electrochimica Acta, 2010, 55, 3884-3890.	5.2	20
41	Particle Indistinguishability Symmetry within a Field Theory. Entropic Effects. Entropy, 2009, 11, 238-248.	2.2	1
42	Simple field theoretical approach of Coulomb systems. Entropic effects. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 214038.	2.1	3
43	Spontaneous Polarization of the Neutral Interface for Valence Asymmetric Coulombic Systems. Journal of Physical Chemistry B, 2009, 113, 2006-2012.	2.6	2
44	A formally exact field theory for classical systems at equilibrium. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 125401.	2.1	7
45	Response to â€œComment on â€˜Contact conditions for the charge in the theory of the electrical double layerâ€™ â€•[J. Chem. Phys. 128, 117101 (2008)]. Journal of Chemical Physics, 2008, 128, .	3.0	8
46	On the contact conditions for the charge profile in the theory of the electrical double layer for nonsymmetrical electrolytes. Journal of Chemical Physics, 2008, 128, 174702.	3.0	11
47	New results from the contact theorem for the charge profile for symmetric electrolytes. Journal of Chemical Physics, 2007, 127, 014106.	3.0	21
48	Simple Extension of a Field Theory Approach for the Description of the Double Layer Accounting for Excluded Volume Effects. Journal of Physical Chemistry C, 2007, 111, 15700-15705.	3.1	11
49	Field theoretical approach to the liquid state. Elements of comprehension of the role of the ideal entropy. Journal of Molecular Liquids, 2007, 131-132, 48-52.	4.9	2
50	Anomalous temperature dependence of the differential capacitance in valence asymmetric electrolytes. Comparison of Monte Carlo simulation results and the field theoretical approach. Molecular Physics, 2006, 104, 3777-3786.	1.7	20
51	Micelle formation in ethyl-ammonium nitrate (an ionic liquid). Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2006, 275, 50-54.	4.7	48
52	Field theoretical description of the liquid state. Exact relations. The role of the ideal entropy revisited. Molecular Physics, 2006, 104, 3443-3450.	1.7	3
53	Anomalous temperature dependence of differential capacity at an uncharged interface with Debyeâ€"HÃ¼ckel electrolyte: Field theoretical approach. Journal of Electroanalytical Chemistry, 2005, 582, 41-49.	3.8	26
54	Contact conditions for the charge in the theory of the electrical double layer. Journal of Chemical Physics, 2005, 123, 234705.	3.0	27

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55	Ion transfer processes at ionic liquid based redox active drop deposited on an electrode surface. Chemical Communications, 2005, , 2954.	4.1	35
56	Specific ionic interactions within a simple extension of the Gouyâ€“Chapman theory including hard sphere effects. Journal of Electroanalytical Chemistry, 2004, 572, 51-59.	3.8	18
57	Simple extension of the Gouyâ€“Chapman theory including hard sphere effects.. Journal of Electroanalytical Chemistry, 2003, 540, 17-23.	3.8	32
58	Field theory for ionic systems. From fluctuations and structure at a hard wall to thermodynamics. Electrochimica Acta, 2003, 48, 2967-2974.	5.2	11
59	Density field theory for a fluid interacting with the Yukawa potential. Role of the ideal entropy. Molecular Physics, 2003, 101, 3197-3202.	1.7	8
60	Field theoretical approach to inhomogeneous ionic systems: thermodynamic consistency with the contact theorem, Gibbs adsorption and surface tension. Molecular Physics, 2003, 101, 2545-2558.	1.7	24
61	Fluctuations of electric variables in Debyeâ€“HÃ¼ckel electrolyte at a neutral hard wall. Electrochimica Acta, 2001, 46, 3051-3055.	5.2	3
62	Bicontinuous phases in coulombic systems. The role of specific interactions. Journal of Molecular Liquids, 2000, 87, 163-175.	4.9	1
63	Desorption transition at charged interfaces: Theoretical approach and experimental evidence. Physical Review E, 2000, 61, 3877-3883.	2.1	5
64	Theoretical analysis of the competition between coulombic and specific interactions at charged interfaces. Electrochimica Acta, 1998, 43, 2947-2955.	5.2	2
65	A simple model to investigate the effects of non-Coulombic interactions on the structure of charged interfaces. Journal of Chemical Physics, 1998, 109, 3607-3618.	3.0	9
66	A field theory study of the effect of specific interactions in ionic systems: A simple model. Journal of Chemical Physics, 1998, 108, 8572-8583.	3.0	23
67	Invariance properties and correlation functions in liquid-state theory: Connection with the Ward-Takahashi identities. Physical Review E, 1996, 53, 2320-2325.	2.1	4
68	Properties of then-body correlation functions near the liquid-gas critical point. Correlation inequalities. Journal of Statistical Physics, 1995, 80, 1241-1278.	1.2	1
69	Crossed beam study of the I2+F2â†’IF(B)+IF(X) reaction: Spectrum of the chemiluminescence and rovibrational distribution of IF(B). Journal of Chemical Physics, 1989, 90, 4198-4207.	3.0	3