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	Morphology of corroded surfaces: Contribution of cellular automaton modelling. Corrosion Science, 2011, 53, 418-425.	6.6	56
2	Micelle formation in ethyl-ammonium nitrate (an ionic liquid). Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2006, 275, 50-54.	4.7	48
3	3D cellular automata simulations of intra and intergranular corrosion. Corrosion Science, 2016, 112, 438-450.	6.6	41
4	Ion transfer processes at ionic liquid based redox active drop deposited on an electrode surface. Chemical Communications, 2005, , 2954.	4.1	35
5	Corrosion-passivation processes in a cellular automata based simulation study. Journal of Supercomputing, 2013, 65, 697-709.	3.6	35
6	Simple extension of the Gouyâ€“Chapman theory including hard sphere effects.. Journal of Electroanalytical Chemistry, 2003, 540, 17-23.	3.8	32
7	Three dimensional discrete stochastic model of occluded corrosion cell. Corrosion Science, 2016, 111, 230-241.	6.6	32
8	Contact conditions for the charge in the theory of the electrical double layer. Journal of Chemical Physics, 2005, 123, 234705.	3.0	27
9	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
10	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
11	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
12	New results from the contact theorem for the charge profile for symmetric electrolytes. Journal of Chemical Physics, 2007, 127, 014106.	3.0	21
13	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
14	Simulations of passivation phenomena based on discrete lattice gas automata. Electrochimica Acta, 2010, 55, 3884-3890.	5.2	20
15	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
16	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
17	The role of adsorption in passivation phenomena modelled by discrete lattice gas automata. Electrochimica Acta, 2011, 56, 3963-3968.	5.2	17
18	Cyclic voltammetry simulations with cellular automata. Journal of Computational Science, 2015, 11, 269-278.	2.9	17

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19	Intergranular corrosion: Comparison between experiments and cellular automata. Corrosion Science, 2020, 177, 108953.	6.6	15
20	Cellular automata approach to corrosion and passivity phenomena. Pure and Applied Chemistry, 2012, 85, 247-256.	1.9	14
21	Pitting corrosion modelling by means of a stochastic cellular automata-based model. Corrosion Engineering Science and Technology, 2017, 52, 605-610.	1.4	12
22	Probabilistic cellular automata model of generalised corrosion, transition to localised corrosion. Corrosion Engineering Science and Technology, 2017, 52, 186-193.	1.4	12
23	Field theory for ionic systems. From fluctuations and structure at a hard wall to thermodynamics. Electrochimica Acta, 2003, 48, 2967-2974.	5.2	11
24	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
25	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
26	Yukawa fluid at a hard wall: field theory description. Molecular Physics, 2011, 109, 695-708.	1.7	11
27	Crossover from anomalous to normal diffusion in porous media. Physical Review E, 2014, 89, 062126.	2.1	11
28	Cellular automata approach for morphological evolution of localised corrosion. Corrosion Engineering Science and Technology, 2011, 46, 223-227.	1.4	10
29	Modeling Growth of Organized Nanoporous Structures by Anodic Oxidation. Langmuir, 2012, 28, 13034-13041.	3.5	10
30	Crossover from compact to branched films in electrodeposition with surface diffusion. Physical Review E, 2017, 96, 022805.	2.1	10
31	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
32	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
33	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
34	Effect of Adsorbate Diffusion on the Dendritic Morphology of Electrodeposited Films. Journal of Physical Chemistry C, 2018, 122, 21418-21432.	3.1	8
35	A formally exact field theory for classical systems at equilibrium. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 125401.	2.1	7
36	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

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37	Influence of the grid cell geometry on 3D cellular automata behavior in intergranular corrosion. Journal of Computational Science, 2021, 53, 101322.	2.9	7
38	Overview of Cellular Automaton Models for Corrosion. Lecture Notes in Computer Science, 2014, , 187-196.	1.3	7
39	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
40	Desorption transition at charged interfaces: Theoretical approach and experimental evidence. Physical Review E, 2000, 61, 3877-3883.	2.1	5
41	3D simulations of the metal passivation process in potentiostatic conditions using discrete lattice gas automaton. Electrochimica Acta, 2019, 295, 173-180.	5.2	5
42	Cathodic control using cellular automata approach. Materials and Corrosion - Werkstoffe Und Korrosion, 2022, 73, 1631-1643.	1.5	5
43	Intergranular corrosion in evolving media: Experiment and modeling by cellular automata. Corrosion Science, 2022, 205, 110457.	6.6	5
44	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
45	Cellular automata modeling of Scanning Electrochemical Microscopy (SECM) experiments. Electrochimica Acta, 2014, 145, 314-318.	5.2	4
46	Two-Yukawa fluid at a hard wall: Field theory treatment. Journal of Chemical Physics, 2015, 142, 194708.	3.0	4
47	Cellular automata model of anodization. Journal of Computational Science, 2015, 11, 309-316.	2.9	4
48	Oscillating Yukawa fluid at a hard wall: field theory description. Molecular Physics, 2016, 114, 2500-2515.	1.7	4
49	3D simulations of ordered nanopore growth in alumina. Electrochimica Acta, 2016, 188, 218-221.	5.2	4
50	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
51	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
52	Fluctuations of electric variables in Debyeâ€"HÃ¼ckel electrolyte at a neutral hard wall. Electrochimica Acta, 2001, 46, 3051-3055.	5.2	3
53	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
54	Simple field theoretical approach of Coulomb systems. Entropic effects. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 214038.	2.1	3

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55	Theoretical analysis of the competition between coulombic and specific interactions at charged interfaces. Electrochimica Acta, 1998, 43, 2947-2955.	5.2	2
56	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
57	Spontaneous Polarization of the Neutral Interface for Valence Asymmetric Coulombic Systems. Journal of Physical Chemistry B, 2009, 113, 2006-2012.	2.6	2
58	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
59	Cellular Automata Based Approach to Corrosion and Passivity Related Phenomena. , 2014, , .		2
60	Contact theorems for anisotropic fluids near a hard wall. Journal of Chemical Physics, 2015, 142, 014705.	3.0	2
61	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
62	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
63	Bicontinuous phases in coulombic systems. The role of specific interactions. Journal of Molecular Liquids, 2000, 87, 163-175.	4.9	1
64	Particle Indistinguishability Symmetry within a Field Theory. Entropic Effects. Entropy, 2009, 11, 238-248.	2.2	1
65	Transition from compact to porous films in deposition with temperature-activated diffusion. Physical Review E, 2015, 92, 012402.	2.1	1
66	In memory of Eduard Vakarin. Condensed Matter Physics, 2015, 18, 37002.	0.7	0
67	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
68	Soft core fluid with competing interactions at a hard wall. Journal of Molecular Liquids, 2022, , 119652.	4.9	0
69	Charge and electric field distributions in the interelectrode region of an inhomogeneous solid electrolyte. Condensed Matter Physics, 2022, 25, 23501.	0.7	0