

Santiago Cuesta-Lopez

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5937424/publications.pdf>

Version: 2024-02-01

62
papers

1,124
citations

516710

16
h-index

414414

32
g-index

62
all docs

62
docs citations

62
times ranked

1386
citing authors

#	ARTICLE	IF	CITATIONS
1	Molten salts database for energy applications. <i>Chemical Engineering and Processing: Process Intensification</i> , 2013, 73, 87-102.	3.6	264
2	TRF2 promotes, remodels and protects telomeric Holliday junctions. <i>EMBO Journal</i> , 2009, 28, 641-651.	7.8	99
3	Bubbles and denaturation in DNA. <i>European Physical Journal E</i> , 2006, 20, 421-434.	1.6	64
4	Can One Predict DNA Transcription Start Sites by Studying Bubbles?. <i>Physical Review Letters</i> , 2005, 95, 218104.	7.8	62
5	Nonlinear Analysis of the Dynamics of DNA Breathing. <i>Journal of Biological Physics</i> , 2009, 35, 73-89.	1.5	61
6	Modelling DNA at the mesoscale: a challenge for nonlinear science?. <i>Nonlinearity</i> , 2008, 21, T91-T100.	1.4	55
7	Database of novel magnetic materials for high-performance permanent magnet development. <i>Computational Materials Science</i> , 2019, 168, 188-202.	3.0	41
8	Thermal Denaturation of DNA Studied with Neutron Scattering. <i>Physical Review Letters</i> , 2011, 106, 048101.	7.8	38
9	Experimental and theoretical studies of sequence effects on the fluctuation and melting of short DNA molecules. <i>Journal of Physics Condensed Matter</i> , 2009, 21, 034103.	1.8	33
10	Common conformational changes in flavodoxins induced by FMN and anion binding: The structure of <i>Helicobacter pylori</i> apoflavodoxin. <i>Proteins: Structure, Function and Bioinformatics</i> , 2007, 69, 581-594.	2.6	24
11	A Double-Deletion Method to Quantifying Incremental Binding Energies in Proteins from Experiment: Example of a Destabilizing Hydrogen Bonding Pair. <i>Biophysical Journal</i> , 2005, 88, 1311-1321.	0.5	23
12	Thermodynamics of protein-cation interaction: Ca ⁺² and Mg ⁺² binding to the fifth binding module of the LDL receptor. <i>Proteins: Structure, Function and Bioinformatics</i> , 2010, 78, 950-961.	2.6	18
13	Guanine radical chemistry reveals the effect of thermal fluctuations in gene promoter regions. <i>Nucleic Acids Research</i> , 2011, 39, 5276-5283.	14.5	18
14	Atomistic spin dynamics simulations of the MnAl ₁₁ phase and its antiphase boundary. <i>Physical Review B</i> , 2017, 96, .	3.2	18
15	Can We Model DNA at the Mesoscale?. <i>Journal of Biological Physics</i> , 2005, 31, 273-301.	1.5	17
16	Structural correlations and melting of B-DNA fibers. <i>Physical Review E</i> , 2011, 83, 061923.	2.1	17
17	Colonization of Electrospun Polycaprolactone Fibers by Relevant Pathogenic Bacterial Strains. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 11467-11473.	8.0	17
18	Influence of Three Commercial Graphene Derivatives on the Catalytic Properties of a <i>Lactobacillus plantarum</i> α -Rhamnosidase When Used as Immobilization Matrices. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 18170-18182.	8.0	17

#	ARTICLE	IF	CITATIONS
19	Atomistic molecular point of view for liquid lead and lithium in Nuclear Fusion technology. Journal of Nuclear Materials, 2013, 440, 98-103.	2.7	16
20	Advanced Synthesis on Lead-free $K_xNa_{(1-x)}NbO_3$ Piezoceramics for Medical Imaging Applications. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700896.	1.8	15
21	Analysis of Polycaprolactone Microfibers as Biofilm Carriers for Biotechnologically Relevant Bacteria. ACS Applied Materials & Interfaces, 2018, 10, 32773-32781.	8.0	15
22	Interatomic potential for the compound-forming Li-Pb liquid alloy. Journal of Nuclear Materials, 2014, 448, 103-108.	2.7	14
23	Computational diagnosis of protein conformational diseases: Short molecular dynamics simulations reveal a fast unfolding of r-LDL mutants that cause familial hypercholesterolemia. Proteins: Structure, Function and Bioinformatics, 2006, 66, 87-95.	2.6	12
24	Photo-sensitizing thin-film ferroelectric oxides using materials databases and high-throughput calculations. Journal of Materials Chemistry A, 2019, 7, 27323-27333.	10.3	12
25	Model for DNA hairpin denaturation. European Physical Journal E, 2005, 16, 235-246.	1.6	10
26	Adding a new dimension to DNA melting curves. Europhysics Letters, 2009, 87, 48009.	2.0	10
27	van Erpet's Reply. Physical Review Letters, 2006, 96, .	7.8	9
28	A high-throughput exploration of magnetic materials by using structure predicting methods. Journal of Applied Physics, 2018, 123, .	2.5	9
29	van Erpet's Reply. Physical Review Letters, 2006, 97, .	7.8	8
30	Mechanically activated metathesis reaction in $NaNH_2$ -MgH ₂ powder mixtures. Journal of Materials Science, 2017, 52, 11891-11899.	3.7	8
31	Thermal denaturation of A-DNA. New Journal of Physics, 2014, 16, 113017.	2.9	7
32	Ab initio molecular dynamics: Relationship between structural phases and the sound velocity in dense hydrogen. Europhysics Letters, 2014, 108, 26001.	2.0	7
33	Kinky DNA in solution: Small-angle-scattering study of a nucleosome positioning sequence. Physical Review E, 2018, 98, .	2.1	7
34	Possible alternatives to critical elements in coatings for extreme applications. IOP Conference Series: Materials Science and Engineering, 2018, 329, 012005.	0.6	7
35	A model on the origin of RNA. Physical Biology, 2005, 2, 200-206.	1.8	6
36	Comment on "A generalized Langevin formalism of complete DNA melting transition" by Das T. and Chakraborty S.. Europhysics Letters, 2009, 85, 68003.	2.0	5

#	ARTICLE	IF	CITATIONS
37	Local Piezoelectric Behavior of Potassium Sodium Niobate Prepared by a Facile Synthesis via Water Soluble Precursors. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1700921.	1.8	5
38	Theoretical Study on Molten Alkali Carbonate Interfaces. <i>Langmuir</i> , 2018, 34, 13065-13076.	3.5	5
39	Nanoscale View of Shock Wave Propagation in Single Crystal Fe, W, and Ta for Nuclear Fusion Technology. <i>Fusion Science and Technology</i> , 2011, 60, 590-594.	1.1	4
40	Nucleation, growth and transport modelling of helium bubbles under nuclear irradiation in lead-lithium with the self-consistent nucleation theory and surface tension corrections. <i>Fusion Engineering and Design</i> , 2013, 88, 3215-3223.	1.9	4
41	Structural properties of hydrogen isotopes in solid phase in the context of inertial confinement fusion. <i>EPJ Web of Conferences</i> , 2013, 59, 16004.	0.3	4
42	Applying high-throughput computational techniques for discovering next-generation of permanent magnets. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2016, 13, 942-950.	0.8	4
43	The methodologies and strategies for the development of novel material systems and coatings for applications in extreme environments – a critical review. <i>Manufacturing Review</i> , 2018, 5, 9.	1.5	4
44	Connecting experimental synthetic variables with the microstructure and electronic properties of doped ferroelectric perovskites for solar cell applications using high-throughput frameworks. <i>Acta Materialia</i> , 2021, 204, 116466.	7.9	4
45	The effect of a micro bubble dispersed gas phase on hydrogen isotope transport in liquid metals under nuclear irradiation. <i>Fusion Engineering and Design</i> , 2013, 88, 3205-3214.	1.9	3
46	Exploring the Crystal Structure Space of CoFe_2P by Using Adaptive Genetic Algorithm Methods. <i>IEEE Transactions on Magnetics</i> , 2017, 53, 1-5.	2.1	3
47	Role of Interface in Multilayered Composites under Irradiation: A Mathematical Investigation. <i>Advances in Materials Science and Engineering</i> , 2017, 2017, 1-16.	1.8	3
48	Melting Transition of Oriented DNA Fibers Submerged in Poly(ethylene glycol) Solutions Studied by Neutron Scattering and Calorimetry. <i>Journal of Physical Chemistry B</i> , 2018, 122, 2504-2515.	2.6	3
49	Insights into Carbon Nanotubes and Fullerenes in Molten Alkali Carbonates. <i>Journal of Physical Chemistry C</i> , 2019, 123, 9909-9918.	3.1	3
50	Development of Novel Material Systems and Coatings for Extreme Environments: A Brief Overview. <i>Jom</i> , 2019, 71, 683-690.	1.9	3
51	Impact of nuclear irradiation on helium bubble nucleation at interfaces in liquid metals coupled to permeation through stainless steels. <i>Fusion Engineering and Design</i> , 2014, 89, 16-24.	1.9	2
52	Self-healing ability assessment of irradiated multilayered composites: A continuum approach. <i>Journal of Nuclear Materials</i> , 2018, 512, 391-406.	2.7	2
53	Theoretical study of the performance of refractory materials for extreme conditions applications. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2018, 432, 24-28.	1.4	2
54	Design of Ligand Binding to an Engineered Protein Cavity Using Virtual Screening and Thermal Up-shift Evaluation. <i>Journal of Computer-Aided Molecular Design</i> , 2005, 19, 421-443.	2.9	1

#	ARTICLE	IF	CITATIONS
55	Improving the mesoscopic modeling of DNA denaturation dynamics. <i>Physical Biology</i> , 2018, 15, 066001.	1.8	1
56	Numerical prediction of vortex trajectories and vortexâ€blade interaction on the CROR engine. <i>Aircraft Engineering and Aerospace Technology</i> , 2020, 92, 1345-1356.	1.2	1
57	Progress in Advanced Materials under Extreme Conditions for Nuclear Fusion Technology. <i>Fusion Science and Technology</i> , 2012, 61, 385-390.	1.1	0
58	SUPERMAT â€ A virtual center for sustainable development of advanced materials operating under extreme conditions. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2016, 13, 1023-1027.	0.8	0
59	Technological Innovations in Metals Engineering. <i>Jom</i> , 2019, 71, 651-654.	1.9	0
60	Materials Modelling Under Extreme Conditions In Nexttower Project: Solar Receivers And Liquid Lead Thermal Storage. , 2020, , .		0
61	Melting transition of oriented Liâ€DNA fibers submerged in ethanol solutions. <i>Biopolymers</i> , 2021, 112, e23422.	2.4	0
62	THE DOCENT CHALLENGE OF NANOTECHNOLOGY, MATERIALS SCIENCE AND BIOMOLECULAR MODELLING: EVALUATION OF VIRTUAL EXPERIMENTS AND 3D SOFTWARE AS EFFICIENT TOOLS TO COMMUNICATE AND TRANSFER KNOWLEDGE. , 2016, , .		0