Santiago Cuesta-Lopez

List of Publications by Year
in descending order

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	Melting transition of oriented Liâ€ÐNA fibers submerged in ethanol solutions. Biopolymers, 2021, 112, e23422.	2.4	0
2	Connecting experimental synthetic variables with the microstructure and electronic properties of doped ferroelectric perovskites for solar cell applications using high-throughput frameworks. Acta Materialia, 2021, 204, 116466.	7.9	4
3	Numerical prediction of vortex trajectories and vortexâ€“blade interaction on the CROR engine. Aircraft Engineering and Aerospace Technology, 2020, 92, 1345-1356.	1.2	1
4	Materials Modelling Under Extreme Conditions In Nextower Project: Solar Receivers And Liquid Lead Thermal Storage. , 2020, , .		0
5	Database of novel magnetic materials for high-performance permanent magnet development. Computational Materials Science, 2019, 168, 188-202.	3.0	41
6	Insights into Carbon Nanotubes and Fullerenes in Molten Alkali Carbonates. Journal of Physical Chemistry C, 2019, 123, 9909-9918.	3.1	3
7	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
8	Development of Novel Material Systems and Coatings for Extreme Environments: A Brief Overview. Jom, 2019, 71, 683-690.	1.9	3
9	Technological Innovations in Metals Engineering. Jom, 2019, 71, 651-654.	1.9	0
10	Melting Transition of Oriented DNA Fibers Submerged in Poly(ethylene glycol) Solutions Studied by Neutron Scattering and Calorimetry. Journal of Physical Chemistry B, 2018, 122, 2504-2515.	2.6	3
11	A high-throughput exploration of magnetic materials by using structure predicting methods. Journal of Applied Physics, 2018, 123, .	2.5	9
12	Local Piezoelectric Behavior of Potassium Sodium Niobate Prepared by a Facile Synthesis via Water Soluble Precursors. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700921.	1.8	5
13	Advanced Synthesis on Leadâ€Free K_xNa_(1â^'x)NbO₃ Piezoceramics for Medical Imaging Applications. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700896.	1.8	15
14	Colonization of Electrospun Polycaprolactone Fibers by Relevant Pathogenic Bacterial Strains. ACS Applied Materials & Interfaces, 2018, 10, 11467-11473.	8.0	17
15	Kinky DNA in solution: Small-angle-scattering study of a nucleosome positioning sequence. Physical Review E, 2018, 98, .	2.1	7
16	Theoretical Study on Molten Alkali Carbonate Interfaces. Langmuir, 2018, 34, 13065-13076.	3.5	5
17	Self-healing ability assessment of irradiated multilayered composites: A continuum approach. Journal of Nuclear Materials, 2018, 512, 391-406.	2.7	2
18	Analysis of Polycaprolactone Microfibers as Biofilm Carriers for Biotechnologically Relevant Bacteria. ACS Applied Materials & Interfaces, 2018, 10, 32773-32781.	8.0	15

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19	Possible alternatives to critical elements in coatings for extreme applications. IOP Conference Series: Materials Science and Engineering, 2018, 329, 012005.	0.6	7
20	Improving the mesoscopic modeling of DNA denaturation dynamics. Physical Biology, 2018, 15, 066001.	1.8	1
21	Theoretical study of the performance of refractory materials for extreme conditions applications. Nuclear Instruments & Methods in Physics Research B, 2018, 432, 24-28.	1.4	2
22	Influence of Three Commercial Graphene Derivatives on the Catalytic Properties of a Lactobacillus plantarum Î±-<scp>l</scp>-Rhamnosidase When Used as Immobilization Matrices. ACS Applied Materials & Interfaces, 2018, 10, 18170-18182.	8.0	17
23	The methodologies and strategies for the development of novel material systems and coatings for applications in extreme environments â^' a critical review. Manufacturing Review, 2018, 5, 9.	1.5	4
24	Exploring the Crystal Structure Space of CoFe₂P by Using Adaptive Genetic Algorithm Methods. IEEE Transactions on Magnetics, 2017, 53, 1-5.	2.1	3
25	Atomistic spin dynamics simulations of the MnAl <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Ï„</mml:mi></mml:math> -phase and its antiphase boundary. Physical Review B, 2017, 96, .	3.2	18
26	Mechanically activated metathesis reaction in NaNH2â€“MgH2 powder mixtures. Journal of Materials Science, 2017, 52, 11891-11899.	3.7	8
27	Role of Interface in Multilayered Composites under Irradiation: A Mathematical Investigation. Advances in Materials Science and Engineering, 2017, 2017, 1-16.	1.8	3
28	SUPERMAT â€“ A virtual center for sustainable development of advanced materials operating under extreme conditions. Physica Status Solidi C: Current Topics in Solid State Physics, 2016, 13, 1023-1027.	0.8	0
29	Applying highâ€throughput computational techniques for discovering nextâ€generation of permanent magnets. Physica Status Solidi C: Current Topics in Solid State Physics, 2016, 13, 942-950.	0.8	4
30	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
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	Interatomic potential for the compound-forming Liâ€“Pb liquid alloy. Journal of Nuclear Materials, 2014, 448, 103-108.	2.7	14
34	Impact of nuclear irradiation on helium bubble nucleation at interfaces in liquid metals coupled to permeation through stainless steels. Fusion Engineering and Design, 2014, 89, 16-24.	1.9	2
35	Molten salts database for energy applications. Chemical Engineering and Processing: Process Intensification, 2013, 73, 87-102.	3.6	264
36	Nucleation, growth and transport modelling of helium bubbles under nuclear irradiation in leadâ€“lithium with the self-consistent nucleation theory and surface tension corrections. Fusion Engineering and Design, 2013, 88, 3215-3223.	1.9	4

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37	The effect of a micro bubble dispersed gas phase on hydrogen isotope transport in liquid metals under nuclear irradiation. Fusion Engineering and Design, 2013, 88, 3205-3214.	1.9	3
38	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
39	Structural properties of hydrogen isotopes in solid phase in the context of inertial confinement fusion. EPJ Web of Conferences, 2013, 59, 16004.	0.3	4
40	Progress in Advanced Materials under Extreme Conditions for Nuclear Fusion Technology. Fusion Science and Technology, 2012, 61, 385-390.	1.1	0
41	Thermal Denaturation of DNA Studied with Neutron Scattering. Physical Review Letters, 2011, 106, 048101.	7.8	38
42	Nanoscale View of Shock Wave Propagation in Single Crystal Fe, W, and Ta for Nuclear Fusion Technology. Fusion Science and Technology, 2011, 60, 590-594.	1.1	4
43	Structural correlations and melting of B-DNA fibers. Physical Review E, 2011, 83, 061923.	2.1	17
44	Guanine radical chemistry reveals the effect of thermal fluctuations in gene promoter regions. Nucleic Acids Research, 2011, 39, 5276-5283.	14.5	18
45	Thermodynamics of proteinâ€cation interaction: Ca⁺² and Mg⁺² binding to the fifth binding module of the LDL receptor. Proteins: Structure, Function and Bioinformatics, 2010, 78, 950-961.	2.6	18
46	Experimental and theoretical studies of sequence effects on the fluctuation and melting of short DNA molecules. Journal of Physics Condensed Matter, 2009, 21, 034103.	1.8	33
47	Comment on â€œA generalized Langevin formalism of complete DNA melting transition" by Das T. and Chakraborty S.. Europhysics Letters, 2009, 85, 68003.	2.0	5
48	Nonlinear Analysis of the Dynamics of DNA Breathing. Journal of Biological Physics, 2009, 35, 73-89.	1.5	61
49	TRF2 promotes, remodels and protects telomeric Holliday junctions. EMBO Journal, 2009, 28, 641-651.	7.8	99
50	Adding a new dimension to DNA melting curves. Europhysics Letters, 2009, 87, 48009.	2.0	10
51	Modelling DNA at the mesoscale: a challenge for nonlinear science?. Nonlinearity, 2008, 21, T91-T100.	1.4	55
52	Common conformational changes in flavodoxins induced by FMN and anion binding: The structure of Helicobacter pylori apoflavodoxin. Proteins: Structure, Function and Bioinformatics, 2007, 69, 581-594.	2.6	24
53	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
54	Bubbles and denaturation in DNA. European Physical Journal E, 2006, 20, 421-434.	1.6	64

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55	van ErpetÂal.Reply:. Physical Review Letters, 2006, 97, .	7.8	8
56	van ErpetÂal.Reply:. Physical Review Letters, 2006, 96, .	7.8	9
57	Model for DNA hairpin denaturation. European Physical Journal E, 2005, 16, 235-246.	1.6	10
58	Can We Model DNA at the Mesoscale?. Journal of Biological Physics, 2005, 31, 273-301.	1.5	17
59	Design of Ligand Binding to an Engineered Protein Cavity Using Virtual Screening and Thermal Up-shift Evaluation. Journal of Computer-Aided Molecular Design, 2005, 19, 421-443.	2.9	1
60	Can One Predict DNA Transcription Start Sites by Studying Bubbles?. Physical Review Letters, 2005, 95, 218104.	7.8	62
61	A Double-Deletion Method to Quantifying Incremental Binding Energies in Proteins from Experiment: Example of a Destabilizing Hydrogen Bonding Pair. Biophysical Journal, 2005, 88, 1311-1321.	0.5	23
62	A model on the origin of RNA. Physical Biology, 2005, 2, 200-206.	1.8	6