Giuseppe Fisicaro

List of Publications by Year
in descending order

46 papers	998 citations	394286 19 h-index	454834 30 g-index
46 all docs	46 docs citations	46 times ranked	1142 citing authors

#	Article	IF	Citations
1	A generalized Poisson and Poisson-Boltzmann solver for electrostatic environments. Journal of Chemical Physics, 2016, 144, 014103.	1.2	88
2	Soft-Sphere Continuum Solvation in Electronic-Structure Calculations. Journal of Chemical Theory and Computation, 2017, 13, 3829-3845.	2.3	76
3	Flexibilities of wavelets as a computational basis set for large-scale electronic structure calculations. Journal of Chemical Physics, 2020, 152, 194110.	1.2	60
4	N-type doping of Ge by As implantation and excimer laser annealing. Journal of Applied Physics, 2014, 115, .	1.1	57
5	Solvent-Aware Interfaces in Continuum Solvation. Journal of Chemical Theory and Computation, 2019, 15, 1996-2009.	2.3	43
6	Extended Defects Formation in Nanosecond Laser-Annealed Ion Implanted Silicon. Nano Letters, 2014, 14, 1769-1775.	4.5	40
7	Continuum embeddings in condensedâ€matter simulations. International Journal of Quantum Chemistry, 2019, 119, e25725.	1.0	40
8	Towards a laser fluence dependent nanostructuring of thin Au films on Si by nanosecond laser irradiation. Applied Surface Science, 2012, 258, 9128-9137.	3.1	37
9	B-doping in Ge by excimer laser annealing. Journal of Applied Physics, 2013, 113, .	1.1	37
10	Genesis and evolution of extended defects: The role of evolving interface instabilities in cubic SiC. Applied Physics Reviews, 2020, 7, 021402.	5.5	35
11	Anomalous Impurity Segregation and Local Bonding Fluctuation in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>I</mml:mi></mml:math>-Si. Physical Review Letters, 2013, 110, 117801.	2.9	34
12	New Approaches and Understandings in the Growth of Cubic Silicon Carbide. Materials, 2021, 14, 5348.	1.3	34
13	Theoretical study of the laser annealing process in FinFET structures. Applied Surface Science, 2019, 467-468, 666-672.	3.1	31
14	Local Order and Rotational Dynamics in Mixed A-Cation Lead Iodide Perovskites. Journal of Physical Chemistry Letters, 2020, 11, 1068-1074.	2.1	31
15	CsPbBr₃, MAPbBr₃, and FAPbBr₃ Bromide Perovskite Single Crystals: Interband Critical Points under Dry N₂ and Optical Degradation under Humid Air. Journal of Physical Chemistry C, 2021, 125, 4938-4945.	1.5	26
16	Laser annealing in Si and Ge: Anomalous physical aspects and modeling approaches. Materials Science in Semiconductor Processing, 2017, 62, 80-91.	1.9	25
17	Wet Environment Effects for Ethanol and Water Adsorption on Anatase TiO₂ (101) Surfaces. Journal of Physical Chemistry C, 2020, 124, 2406-2419.	1.5	24
18	Defect kinetics and dopant activation in submicrosecond laser thermal processes. Applied Physics Letters, 2009, 95, 231901.	1.5	23

#	Article	IF	Citations
19	Coupled Monte Carlo-Poisson method for the simulation of particle-particle effects in dielectrophoretic devices. Applied Physics Letters, 2012, 100, .	1.5	22
20	Kinetic Monte Carlo simulations for transient thermal fields: Computational methodology and application to the submicrosecond laser processes in implanted silicon. Physical Review E, 2012, 86, 036705.	0.8	18
21	Modeling of laser annealing. Journal of Computational Electronics, 2014, 13, 70-94.	1.3	17
22	Surface reconstruction of fluorites in vacuum and aqueous environment. Physical Review Materials, 2017, 1, .	0.9	15
23	Crystallization of implanted amorphous silicon during millisecond annealing by infrared laser irradiation. Applied Physics Letters, 2010, 97, .	1.5	14
24	Kinetic Monte Carlo simulations of boron activation in implanted Si under laser thermal annealing. Applied Physics Express, 2014, 7, 021301.	1.1	14
25	TiO₂ Colloids Laser-Treated in Ethanol for Photocatalytic H₂ Production. ACS Applied Nano Materials, 2020, 3, 9127-9140.	2.4	14
26	Generation and Termination of Stacking Faults by Inverted Domain Boundaries in 3C-SiC. Crystal Growth and Design, 2020, 20, 3104-3111.	1.4	14
27	Role of oxygen on the electrical activation of B in Ge by excimer laser annealing. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 122-125.	0.8	13
28	3C-SiC Growth on Inverted Silicon Pyramids Patterned Substrate. Materials, 2019, 12, 3407.	1.3	12
29	Exploring the Structural Competition between the Black and the Yellow Phase of CsPbI3. Nanomaterials, 2021, 11, 1282.	1.9	12
30	Solid phase phosphorous activation in implanted silicon by excimer laser irradiation. Journal of Applied Physics, 2011, 109, 113513.	1.1	11
31	Laser annealing of SiGe and Ge based devices. Microelectronic Engineering, 2011, 88, 488-491.	1.1	11
32	Modeling boron profiles in silicon after pulsed excimer laser annealing. AIP Conference Proceedings, 2012, , .	0.3	11
33	Dopant activation and damage evolution in implanted silicon after excimer laser annealing. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 940-943.	0.8	10
34	Direct observation of single organic molecules grafted on the surface of a silicon nanowire. Scientific Reports, 2019, 9, 5647.	1.6	10
35	Multiscale modeling of ultrafast melting phenomena. Npj Computational Materials, 2022, 8, .	3.5	10
36	Formation of CsPbI₃ Î³â€Phase at 80â€‰Â°C by Europiumâ€Assisted Snowplow Effect. Advanced Energy and Sustainability Research, 2021, 2, 2100091.	2.8	8

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37	Defect and dopant kinetics in laser anneals of Si. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 154-155, 35-38.	1.7	6
38	Simulation of the boron buildâ€up formation during melting laser thermal annealing. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 89-92.	0.8	6
39	Phononic transport and simulations of annealing processes in nanometric complex structures. Physical Review Materials, 2020, 4, .	0.9	5
40	Atomic scale Monte Carlo simulations of BF₃ plasma immersion ion implantation in Si. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 109-112.	0.8	2
41	Advanced simulations on laser annealing: explosive crystallization and phonon transport corrections. , 2020, , .		2
42	Dopant dynamics and defects evolution in implanted silicon under laser irradiations: A coupled continuum and kinetic Monte Carlo approach. , 2013, , .		0
43	Tailoring Active Defect Centers During the Growth of Group IV Crystals. Proceedings (mdpi), 2019, 12, 32.	0.2	0
44	Atomistic modeling of laser-related phenomena. , 2021, , 79-136.		0
45	10.1063/1.5132300.1. , 2020, , .		0
46	Computational Study of the Silicon Vacancy in 3C-SiC and Perspectives for Quantum Technologies. Materials Science Forum, 0, 1062, 309-314.	0.3	0