Konrad Sakowski

List of Publications by Year
in descending order

37	382	840776 11	839539 18
papers	citations	h-index	g-index

39	39	39	380
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ab initio studies of electronic properties of bare GaN(0001) surface. Journal of Applied Physics, 2009, 106, .	2.5	43
2	Simulation of trap-assisted tunneling effect on characteristics of gallium nitride diodes. Journal of Applied Physics, 2012, 111, .	2.5	32
3	Correlation of optical and structural properties of GaN/AlN multi-quantum wellsâ€"Ab initio and experimental study. Journal of Applied Physics, 2016, 119, 015703.	2.5	27
4	Density Functional Theory (DFT) Simulations and Polarization Analysis of the Electric Field in InN/GaN Multiple Quantum Wells (MQWs). Journal of Physical Chemistry C, 2010, 114, 14410-14416.	3.1	24
5	Ab initio and experimental studies of polarization and polarization related fields in nitrides and nitride structures. AIP Advances, 2017, 7, .	1.3	23
6	Fermi level pinning and the charge transfer contribution to the energy of adsorption at semiconducting surfaces. Journal of Applied Physics, 2014, 115, 043529.	2.5	21
7	Ab initio determination of electron affinity of polar nitride surfaces, clean and under Cs coverage. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, .	2.1	19
8	Structural and electronic properties of AlN(0001) surface under partial N coverage as determined by ab initio approach. Journal of Applied Physics, 2015, 118, .	2.5	16
9	Relevance of intra-hospital patient movements for the spread of healthcare-associated infections within hospitals - a mathematical modeling study. PLoS Computational Biology, 2021, 17, e1008600.	3.2	15
10	High pressure and time resolved studies of optical properties of n-type doped GaN/AlN multi-quantum wells: Experimental and theoretical analysis. Journal of Applied Physics, 2016, 120, .	2.5	14
11	Thermodynamic foundations of applications of ab initio methods for determination of the adsorbate equilibria: hydrogen at the GaN(0001) surface. Physical Chemistry Chemical Physics, 2017, 19, 29676-29684.	2.8	14
12	Thermodynamics of GaN(s)-NH 3 (v)+N 2 (v)+H 2 (v) system â€" Electronic aspects of the processes at GaN(0001) surface. Surface Science, 2017, 662, 12-33.	1.9	12
13	General aspects of the vapor growth of semiconductor crystals â€" A study based on DFT simulations of the NH3/NH2 covered GaN(0001) surface in hydrogen ambient. Journal of Crystal Growth, 2014, 390, 71-79.	1.5	11
14	Adsorption of N2 and H2 at AlN(0001) Surface: Ab Initio Assessment of the Initial Stage of Ammonia Catalytic Synthesis. Journal of Physical Chemistry C, 2018, 122, 20301-20311.	3.1	9
15	Influence of pressure on the properties of GaN/AlN multi-quantum wells â€" Ab initio study. Journal of Physics and Chemistry of Solids, 2016, 93, 100-117.	4.0	8
16	Chemical inactivity of GaN(0001) surface â€" The role of oxygen adsorption â€" Ab initio picture. Materials Science in Semiconductor Processing, 2019, 91, 252-259.	4.0	8
17	Modelling pathogen spread in a healthcare network: Indirect patient movements. PLoS Computational Biology, 2020, 16, e1008442.	3.2	8
18	Adsorption of ammonia on hydrogen covered GaN(0001) surface â€" Density Functional Theory study. Journal of Crystal Growth, 2014, 401, 514-517.	1.5	7

#	Article	IF	Citations
19	Impact of inter-hospital transfers on the prevalence of resistant pathogens in a hospitalâ€“community system. Epidemics, 2020, 33, 100408.	3.0	7
20	DFT study of ammonia desorption from the GaN(0001) surface covered with a NH3/NH2 mixture. Journal of Crystal Growth, 2014, 403, 105-109.	1.5	6
21	Critical Evaluation of Various Spontaneous Polarization Models and Induced Electric Fields in III-Nitride Multi-Quantum Wells. Materials, 2021, 14, 4935.	2.9	6
22	Instantaneous decay rate analysis of time resolved photoluminescence (TRPL): Application to nitrides and nitride structures. Journal of Alloys and Compounds, 2020, 823, 153791.	5.5	5
23	Adsorption of gallium on GaN(0001) surface in ammonia-rich conditions: A new effect associated with the Fermi level position. Journal of Crystal Growth, 2014, 401, 78-81.	1.5	4
24	Dissipation of the excess energy of the adsorbate-thermalization via electron transfer. Physical Chemistry Chemical Physics, 2017, 19, 9149-9155.	2.8	4
25	Catalytic Synthesis of Nitric Monoxide at the AlN(0001) Surface: Ab Initio Analysis. Journal of Physical Chemistry C, 2019, 123, 10893-10906.	3.1	4
26	Ab initio and thermodynamic picture of Al adsorption of AlN(0001) surface â€“ Role of bond creation and electron transition contributions. Applied Surface Science, 2020, 532, 147419.	6.1	4
27	On the composite discontinuous Galerkin method for simulations of electric properties of semiconductor devices. Electronic Transactions on Numerical Analysis, 0, 51, 75-98.	0.0	4
28	Numerical analysis of growth kinetics of bulk III-V crystals grown by liquid phase electroepitaxy. Crystal Research and Technology, 2010, 45, 1290-1294.	1.3	3
29	Effects of incomplete inter-hospital network data on the assessment of transmission dynamics of hospital-acquired infections. PLoS Computational Biology, 2021, 17, e1008941.	3.2	3
30	Analysis of the AOK Plus data and derived hospital network. Mathematica Applicanda, 2019, 47, .	0.0	3
31	Doping effects in InN/GaN short-period quantum well structuresâ€”Theoretical studies based on density functional methods. Journal of Crystal Growth, 2014, 401, 652-656.	1.5	2
32	Electric field dynamics in nitride structures containing quaternary alloy (Al, In, Ga)N. Journal of Applied Physics, 2016, 120, 015702.	2.5	2
33	Adsorption of nitrogen at AlN(000-1) surface â€“ Decisive role of structural and electronic factors. Surface Science, 2021, 713, 121891.	1.9	2
34	Modification of the Newtonâ€™s Method for the Simulations of Gallium Nitride Semiconductor Devices. Lecture Notes in Computer Science, 2014, , 551-560.	1.3	2
35	Discretization of the Drift-Diffusion Equations with the Composite Discontinuous Galerkin Method. Lecture Notes in Computer Science, 2016, , 391-400.	1.3	1
36	Optimization of InGaN Laser Diodes Based on Numerical Simulations. Acta Physica Polonica A, 2016, 129, A-33-A-35.	0.5	1

#	Article	IF	Citations
37	Al coverage of AlN(0001) surface and Al vapor pressure â€“ Thermodynamic assessment based on ab initio calculations. Computational Materials Science, 2022, 203, 111159.	3.0	0