Sergei A Tarelkin

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

47 papers	561 citations	13 h-index	22 g-index
51 ext. papers	682 ext. citations	2.2 avg, IF	3.57 L-index

#	Paper	IF	Citations
47	Carbon nanotube cloth as a promising electrode material for flexible aqueous supercapacitors. *Journal of Applied Electrochemistry*, **2022**, 52, 487-498	2.6	1
46	Near-far IR photoconductivity damping in hyperdoped Si at low temperatures. *Optical Materials Express*, **2021**, 11, 3792	2.6	2
45	Electrical properties and deep trap spectra in Ga2O3 films grown by halide vapor phase epitaxy on p-type diamond substrates. *Journal of Applied Physics*, **2021**, 129, 185701	2.5	6
44	Two-Step Reactive Ion Etching Process for Diamond-Based Nanophotonics Structure Formation. *Physica Status Solidi (A) Applications and Materials Science*, **2021**, 218, 2000206	1.6	1
43	Optimization of the coherence properties of diamond samples with an intermediate concentration of NV centers. *Results in Physics*, **2021**, 21, 103845	3.7	6
42	Intracenter dipole transitions of a hydrogen-like boron acceptor in diamond: Oscillator strengths and line broadening. *Diamond and Related Materials*, **2021**, 120, 108629	3.5	0
41	Mid-IR-Sensitive n/p-Junction Fabricated on p-Type Si Surface via Ultrashort Pulse Laser n-Type Hyperdoping and High-Temperature Annealing. *ACS Applied Electronic Materials*, **2021**, 3, 769-777	4	1
40	High-Pressure High-Temperature Single-Crystal Diamond Type IIa Characterization for Particle Detectors. *Physica Status Solidi (A) Applications and Materials Science*, **2020**, 217, 1900888	1.6	1
39	Spatially controlled fabrication of single NV centers in IIa HPHT diamond. *Optical Materials Express*, **2020**, 10, 198	2.6	12
38	Electronic band structure of phosphorus-doped single crystal diamond: Dynamic Jahn-Teller distortion of the tetrahedral donor ground state. *Physical Review B*, **2020**, 102,	3.3	2
37	Large substitutional impurity isotope shift in infrared spectra of boron-doped diamond. *Physical Review B*, **2020**, 102,	3.3	1
36	Raman Scattering of Quasi-Single-Photon Pulses in Pumped Fiber. *Semiconductors*, **2020**, 54, 966-968	0.7	
35	Ultrawide-Bandgap p-n Heterojunction of Diamond/β-Ga2O3 for a Solar-Blind Photodiode. *ECS Journal of Solid State Science and Technology*, **2020**, 9, 045004	2	20
34	Dynamics of infrared excitations in boron doped diamond. *Diamond and Related Materials*, **2019**, 92, 259-265	3.5	3
33	Deep trap analysis in green light emitting diodes: Problems and solutions. *Journal of Applied Physics* , **2019**, 125, 215701	2.5	5
32	Low Temperature Thermal Conductivity of Heavily Boron-Doped Synthetic Diamond: Influence of Boron-Related Structure Defects. *Journal of Superhard Materials*, **2019**, 41, 24-31	0.9	5
31	Testing of a Prototype Detector of Heavy Charged Particles Based on Diamond Epitaxial Films Obtained by Gas-Phase Deposition. *Instruments and Experimental Techniques*, **2019**, 62, 473-479	0.5	0

30	Nonvertical Sidewall Angle Influence on the Efficiency of Diamond-on-Insulator Grating Couplers. *Physica Status Solidi (A) Applications and Materials Science*, **2019**, 216, 1900271	1.6	1
29	High power density nuclear battery prototype based on diamond Schottky diodes. *Diamond and Related Materials*, **2018**, 84, 41-47	3.5	41
28	Superconductivity, Magnetoresistance, Magnetic Anomaly and Crystal Structure of New Phases of Topological Insulators Bi2Se3and Sb2Te3. *Journal of Physics: Conference Series*, **2018**, 969, 012152	0.3	2
27	Compensation and persistent photocapacitance in homoepitaxial Sn-doped Ga2O3. *Journal of Applied Physics*, **2018**, 123, 115702	2.5	57
26	Diamond Microstructuring by Deep Anisotropic Reactive Ion Etching. *Physica Status Solidi (A) Applications and Materials Science*, **2018**, 215, 1800273	1.6	9
25	Electrical Properties of Bulk, Non-Polar, Semi-Insulating M-GaN Grown by the Ammonothermal Method. *ECS Journal of Solid State Science and Technology*, **2018**, 7, P260-P265	2	11
24	Electrical Properties of High-Quality Synthetic Boron-Doped Diamond Single Crystals and Schottky Barrier Diodes on Their Basis. *Inorganic Materials*, **2018**, 54, 1469-1476	0.9	1
23	Thin large area vertical Schottky barrier diamond diodes with low on-resistance made by ion-beam assisted lift-off technique. *Diamond and Related Materials*, **2017**, 75, 78-84	3.5	19
22	Structural, electrical and luminescent characteristics of ultraviolet light emitting structures grown by hydride vapor phase epitaxy. *Modern Electronic Materials*, **2017**, 3, 32-39	0.3	
21	Using electron backscatter diffraction to investigate the influence of mechanical polishing on the state of the surface of diamond. *Journal of Surface Investigation*, **2017**, 11, 125-129	0.5	3
20	Defects responsible for lifetime degradation in electron irradiated n-GaN grown by hydride vapor phase epitaxy. *Applied Physics Letters*, **2017**, 110, 112102	3.4	21
19	Evidence of linear Zeeman effect for infrared intracenter transitions in boron doped diamond in high magnetic fields. *Diamond and Related Materials*, **2017**, 75, 52-57	3.5	4
18	Degradation-induced low frequency noise and deep traps in GaN/InGaN near-UV LEDs. *Applied Physics Letters*, **2017**, 111, 062103	3.4	13
17	Thermal conductivity of synthetic boron-doped single-crystal HPHT diamond from 20 to 400 K. *MRS Communications*, **2016**, 6, 71-76	2.7	12
16	Electrical Properties of Diamond Platinum Vertical Schottky Barrier Diodes. *Materials Today: Proceedings*, **2016**, 3, S159-S164	1.4	3
15	Isothermal sections of Tm-Ag-Sn and Lu-Ag-Sn ternary systems at 873K. *Journal of Alloys and Compounds*, **2016**, 688, 828-839	5.7	1
14	Comparative study of different metals for Schottky barrier diamond betavoltaic power converter by EBIC technique. *Physica Status Solidi (A) Applications and Materials Science*, **2016**, 213, 2492-2497	1.6	15
13	Deep traps determining the non-radiative lifetime and defect band yellow luminescence in n-GaN. *Journal of Alloys and Compounds*, **2016**, 686, 1044-1052	5.7	24

12	Studies of deep level centers determining the diffusion length in epitaxial layers and crystals of undoped n-GaN. *Journal of Applied Physics*, **2016**, 119, 205109	2.5	23
11	Heat capacity of bulk boron-doped single-crystal HPHT diamonds in the temperature range from 2 to 400 K. *Journal of Superhard Materials*, **2016**, 38, 412-416	0.9	4
10	Electron traps as major recombination centers in n-GaN films grown by metalorganic chemical vapor deposition. *Applied Physics Express*, **2016**, 9, 061002	2.4	13
9	Power high-voltage and fast response Schottky barrier diamond diodes. *Diamond and Related Materials*, **2015**, 57, 32-36	3.5	53
8	Superconductivity in bulk polycrystalline metastable phases of Sb 2 Te 3 and Bi 2 Te 3 quenched after high-pressure–high-temperature treatment. *Chemical Physics Letters*, **2015**, 631-632, 97-102	2.5	14
7	Transport properties of nanocomposite thermoelectric materials based on Si and Ge. *Physics of the Solid State*, **2015**, 57, 605-612	0.8	4
6	Power diamond vertical Schottky barrier diode with 10 A forward current. *Physica Status Solidi (A) Applications and Materials Science*, **2015**, 212, 2621-2627	1.6	28
5	Photoluminescence enhancement by localized surface plasmons in AlGaN/GaN/AlGaN double heterostructures. *Physica Status Solidi - Rapid Research Letters*, **2015**, 9, 575-579	2.5	4
4	Development of nuclear microbattery prototype based on Schottky barrier diamond diodes. *Physica Status Solidi (A) Applications and Materials Science*, **2015**, 212, 2539-2547	1.6	49
3	Weak superconductivity in the surface layer of a bulk single-crystal boron-doped diamond. *Europhysics Letters*, **2014**, 108, 67014	1.6	7
2	Electrical properties of the high quality boron-doped synthetic single-crystal diamonds grown by the temperature gradient method. *Diamond and Related Materials*, **2013**, 35, 19-23	3.5	57
1	Hopping carrier transport in epitaxial V:TiO2 □x layers. *Semiconductors*, **2012**, 46, 1589-1592	0.7	1