# Sergey V Baryshev

List of Publications by Year
in descending order



| 21 | 264 | 933447 10 | 940533 16 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 21 | 21 | 21 | 202 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | High quantum efficiency ultrananocrystalline diamond photocathode for photoinjector applications. Applied Physics Letters, 2014, 105, . | 3.3 | 42 |
| 2 | Locally Resolved Electron Emission Area and Unified View of Field Emission from Ultrananocrystalline Diamond Films. ACS Applied Materials & Interfaces, 2017, 9, 33229-33237. | 8.0 | 34 |
| 3 | GHz laser-free time-resolved transmission electron microscopy: A stroboscopic high-duty-cycle method. Ultramicroscopy, 2016, 161, 130-136. | 1.9 | 31 |
| 4 | Planar ultrananocrystalline diamond field emitter in accelerator radio frequency electron injector: Performance metrics. Applied Physics Letters, 2014, 105, . | 3.3 | 28 |
| 5 | Observation of Field-Emission Dependence on Stored Energy. Physical Review Letters, 2015, 115, 264802. | 7.8 | 20 |
| 6 | InÂSituObservation of Dark Current Emission in a High Gradient rf Photocathode Gun. Physical Review Letters, 2016, 117, 084801. | 7.8 | 14 |
| 7 | Field emission microscopy of carbon nanotube fibers: Evaluating and interpreting spatial emission. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2020, 38, . | 1.2 | 14 |
| 8 | Theoretical evaluation of electronic density-of-states and transport effects on field emission from n-type ultrananocrystalline diamond films. Journal of Applied Physics, 2019, 125, . | 2.5 | 11 |
| 9 | Mean transverse energy of ultrananocrystalline diamond photocathode. Applied Physics Letters, 2019, 114, . | 3.3 | 11 |
| 10 | Electron emission projection imager. Review of Scientific Instruments, 2017, 88, 033701. | 1.3 | 10 |
| 11 | High power conditioning and benchmarking of planar nitrogen-incorporated ultrananocrystalline diamond field emission electron source. Physical Review Accelerators and Beams, 2019, 22, . | 1.6 | 10 |
| 12 | Field electron emission induced glow discharge in a nanodiamond vacuum diode. Journal Physics D: Applied Physics, 2019, 52, 325301. | 2.8 | 9 |
| 13 | Dynamic graphitization of ultra-nano-crystalline diamond and its effects on material resistivity. Journal of Applied Physics, 2020, 128, . | 2.5 | 7 |
| 14 | Nanodiamond Thin Film Field Emitter Cartridge for Miniature High-Gradient Radio Frequency ${X}$ -Band Electron Injector. IEEE Transactions on Electron Devices, 2018, 65, 1132-1138. | 3.0 | 6 |
| 15 | Submicrometer ultrananocrystalline diamond films processed in oxygen and hydrogen plasma and analyzed by UV-vis spectroscopy: Thickness and optical constant results. Surface Science Spectra, 2020, 27, 026601. | 1.3 | 4 |
| 16 | Cryogenic operation of planar ultrananocrystalline diamond field emission source in SRF injector. Applied Physics Letters, 2021, 118, . | 3.3 | 3 |
| 17 | FEbeam: Cavity and electron emission data conversion, processing, and analysis. A freeware toolkit for rf injectors. Review of Scientific Instruments, 2021, 92, 053305. | 1.3 | 3 |
| 18 | Ampere-class bright field emission cathode operated at <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>100</mml:mn><mml:mtext>â€‰</mml:mtext><mml:mtext>â€‰</mml:mtext><mml:mi>MV mathvariant="normal">m</mml:mi></mml:mrow></mml:math>. Physical Review Accelerators and Beams, 2021, 24, . | 1.6 | 3 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Confirmation of Transit Time-Limited Field Emission in Advanced Carbon Materials with a Fast Pattern Recognition Algorithm. ACS Applied Electronic Materials, 2021, 3, 4990-4999. | 4.3 | 2 |
| 20 | Traveling wakefield tube: THz source powered by nonrelativistic electron beam. Journal of Applied Physics, 2021, 130, 123101. | 2.5 | 1 |
| 21 | Current Saturation in Semiconductor and Semimetallic Field Emitters. , 2018, , . | | 1 |