

Сведения о научном руководителе

ФИО	Чернега Николай Владимирович
Ученая степень, отрасль науки, шифр и наименование научной специальности, по которой защищена диссертация	доктор физико-математических наук по специальности 01.04.05 – Оптика
Полное наименование организации, являющейся местом работы научного руководителя	Федеральное государственное бюджетное учреждение науки Физический институт им. П.Н. Лебедева Российской академии наук (ФИАН)
Должность, занимаемая в этой организации	ведущий научный сотрудник Оптического отдела

Список основных публикаций научного руководителя за последние 5 лет

1. Freezing the Suspension of Laser Microcrystals—A New Way for Increasing the Luminescence Efficiency Response / N.V. Tcherniega [et al.] // IEEE Journal of Quantum Electronics. 2024. V. 60(2). P. 1-5.
2. Tuning the efficiency of Random Laser Generation in a Suspension of ZnO Nanoparticles by Means of its Directional Freezing / N.V. Tcherniega [et al.] // Journal of Russian Laser Research. 2023. V. 44(6). P. 691-699.
3. Stimulated Raman Scattering of Light in Liquids in the Ultrasonic Wave Field / N.V. Tcherniega [et al.] // Bulletin of the Lebedev Physics Institute. 2023. V. 50(6). P. 224-228.
4. Synthetic Opals in Laser-Induced Breakdown Spectroscopy Problems / N.V. Tcherniega [et al.] // Physics of Wave Phenomena. 2023. V. 31(1). P. 51-58.
5. Stimulated low-frequency Raman scattering of light: An effective way of laser Q-switching / N.V. Tcherniega [et al.] // Optics & Laser Technology. 2022. V. 156. P. 108559.
6. Second-Harmonic Generation in Aggregates of Lithium Niobate Particles Formed upon Suspension Freezing / N.V. Tcherniega [et al.] // Photonics. 2022. V. 9(10). P. 705.
7. Numerical Simulation of Optical Properties of One-Dimensional Photonic Crystals Based on Anodic Aluminum Oxide / N.V. Tcherniega [et al.] // Bulletin of the Lebedev Physics Institute. 2022. V. 49(9). P. 294-301.
8. Stimulated low-frequency Raman light scattering in systems of nano-and submicron-sized particles / N.V. Tcherniega [et al.] // Quantum Electronics. 2022. V. 52(6). P. 580.
9. Raman random lasing—Extremely high conversion efficiency and temperature dependence / N.V. Tcherniega [et al.] // Optics Communications. 2022. V. 508. P. 127795.
10. Backward SRS suppression of picosecond pulses in water upon moving the pump beam waist from the water volume through the surface / N.V. Tcherniega [et al.] // Quantum Electronics. 2022. V. 52(3). P. 283.
11. Long-term luminescence in organic liquids at low temperatures / N.V. Tcherniega [et al.] // Laser Physics Letters. 2021. V. 18(7). P. 075301.
12. Electromagnetic microwave generation by acoustic vibrations gives rise to nanoradiophotonics / N.V. Tcherniega [et al.] // Scientific Reports. 2021. V. 11. P. 1-8.

13. High efficiency stimulated low-frequency Raman scattering in a water suspension of dielectric submicron particles / N.V. Tcherniega [et al.] // *Laser Physics Letters*. 2020. V. 17(10). P. 105401.

14. Coherent Stokes and anti-Stokes high-order components generation by biharmonic pumping via stimulated low-frequency Raman / N.V. Tcherniega [et al.] // *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*. 2021. V. 245. P. 118902.

15. Stimulated Raman scattering of light in suspension of diamond microparticles in ethanol and in water / N.V. Tcherniega [et al.] // *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*. 2020. V. 237. P. 118418.