

7. Списъци на научните трудове, изобретенията, цитатите и т.н., включени е минималните национални изисквания по групи показатели, съгласно Правилника за прилагане на ЗРАСРБ, ПП ЗРАСРБ-ИФТТ

Име: Георги Петков Янков

Длъжност: главен асистент

Направление: Лазерна Физика и Физика на Атомите, Молекулите и Плазмата

Група от показатели	Показател	Брой точки
А	1. Дисертационен труд за присъждане на образователна и научна степен „доктор“: “Импулсни лазери на Cu атоми и йони на Sr, Hg, Cd, Zn, Cu и Ag, възбудани с електрическа схема с взаимодействащи контури“	50
Г7	7. Научна публикация в издания, които са реферирани и индексирани в световноизвестни бази данни с научна информация (Web of Science и Scopus), извън хабилитационния труд*	25 за публ. в Q1 20 за публ. в Q2 15 за публ. в Q3 12 за публ. в Q4 10 за публ. в издание със SJR без IF
Г7	1. G. Yankov, L. Dimowa, N. Petrova, M. Tarassov, K. Dimitrov, T. Petrov, B. L. Shivachev, “Synthesis, structural and non-linear optical properties of TeO₂-GeO₂-Li₂O glasses“, Optical Materials, vol. 35, No. 2, pp. 248-251, 2012, IF = 1.918, Q2 в Web of Science и Q1 в Scopus	25
Г7	2. G. Yankov, I. Stefanov, K. Dimitrov, I. Piroeva, L. Dimowa, M. Tarassov, B. Shivachev, H. Yoneda, T. Petrov, “Measurement of nonlinear refractive index and multiphoton absorption by the subpicosecond z-scan method of tellurite multicomponent glassy matrixes having nonlinear susceptibility“, Physica Scripta, vol. T157, art. No. 014026, 2013, IF = 1.296, Q3 в Web of Science и Q3 в Scopus	15
Г7	3. B. Shivachev, K. Koshev, L. Dimowa, G. Yankov, T. Petrov, R. Nikolova, N. Petrova, “Synthesis, growth, structural, thermal, optical properties of new metal-organic crystals: Methyltriphenylphosphonium iodide thiourea and methyltriphenylphosphonium iodide chloroform hemisolvate“, Journal of Crystal Growth, vol. 376, pp. 41-46, 2013, IF = 1.693, Q2 в Web of Science и Q1 в Scopus	25

Г7	Общ брой точки за образователна и научна степен „доктор“ и главен асистент	65
В4	4. Хабилизационен труд – научни публикации в издания, които са реферирани и индексирани в световноизвестни бази данни с научна информация (Web of Science и Scopus)*	25 за публ. в Q1 20 за публ. в Q2 15 за публ. в Q3 12 за публ. в Q4 10 за публ. в издание със SJR без IF
B4	1. E. Iordanova, G. Yankov , S. Karatodorov, L. Kovachev, “Exceeding the boundaries of the spatio-temporal nonlinear optics and filamentation for ultrashort laser pulses”, ACS Omega, vol. 8, No. 3, pp. 3501-3508 2023, IF = 4.132 за 2021 г., Q2 в Web of Science и Q1 в Scopus	25
B4	2. G. Yankov , E. Iordanova, L. Kovachev, “Radiation forces and compression of neutral particles by optical lens”, Optik, vol. 273, art. No. 170452, 2023, IF = 2.840 за 2021 г., Q2 в Web of Science и Q2 в Scopus	20
B4	3. E. Iordanova, G. Yankov , S. Karatodorov, L. Kovachev, “Diffraction-free femtosecond”, Optik, vol. 267, art. No. 16968, 2022, IF = 2.840 за 2021 г., Q2 в Web of Science и Q2 в Scopus	20
B4	4. N. Nedyalkov, N. Stankova, M. Koleva, R. Nikov, L. Alexandrov, R. Iordanova, E. Iordanova, G. Yankov , “Laser processing of noble metal doped glasses by femto- and nanosecond laser pulses”, Applied Surface Science, vol. 475, pp. 479-486, 2019, IF = 6.182, Q1 в Web of Science и Q1 в Scopus	25
B4	5. G. Yankov , S. Karatodorov, V. Mihailov, V. Tankova, N. Nedyalkov, E. Iordanova, “Damage threshold in ablation regime induced by femtosecond laser irradiation on transparent media”, Comptes Rendus de l’Académie Bulgare des Sciences, vol. 76, No. 3, pp. 343–351, 2023, IF = 0.326 за 2021 г., Q3 в Scopus	15
B4	6. G. Yankov , E. Iordanova, N. Nedyalkov, M. Zamfirescu, “Preliminary results on non-linear effects in Au-ion-doped glass materials irradiated by femtosecond laser pulses”, Journal of Physics: Conference Series, vol. 1492, No. 1, art. No. 012060, 2020, Q4 в Scopus	12
В4	Общ брой точки за хабилизационен труд	117

Г7	7. Научна публикация в издания, които са реферирани и индексирани в световноизвестни бази данни с научна информация (Web of Science и Scopus), извън хабилитационния труд*	25 за публ. в Q1 20 за публ. в Q2 15 за публ. в Q3 12 за публ. в Q4 10 за публ. в издание със SJR без IF
Г7	1. G. Yankov , N. Stankova, E. Iordanova, "The effect of femtosecond laser pulse irradiation on the properties of advanced medical grade PDMS polymer", Comptes Rendus de l'Académie Bulgare des Sciences, vol. 76, No. 2, pp. 175–183, 2023. IF = 0.326 за 2021 г., Q3 в Scopus	15
Г7	2. E. Iordanova, G. Yankov , N. Stankova, N. Nedyalkov, "Modification and activation of the surface of medical-grade PDMS after irradiation by ultrashort laser pulses", Journal of Physics: Conference Series, vol. 2240, No. 1, art. No. 012051, 2022, SJR 0.210	10
Г7	3. N. Stankova, A. Nikolov, E. Iordanova, G. Yankov , N. Nedyalkov, P. Atanasov, D. Tatchev, E. Valova, K. Kolev, S. Armyanov, D. Karashanova, N. Fukata, "New Approach toward Laser-Assisted Modification of Biocompatible Polymers Relevant to Neural Interfacing Technologies", Polymers, vol. 13, No. 17, art. No. 3004, 2021, IF = 4.967 , Q1 в Web of Science и Q1 в Scopus	25
Г7	4. E Iordanova, G Yankov, A Daskalova, A Dikovska, L Angelova, D Aceti, E Filipov, G Stanev, B Calin, M Zamfirescu, "Ultra-short laser modification of chitosan/silver nanoparticles (AgNPs) thin films for potential antimicrobial applications", Journal of Physics: Conference Series Materials Science and Engineering 1056 012002 (2021) SJR (2019): 0.198	10
Г7	5. A. Daskalova, I. Bliznakova, E. Iordanova, G. Yankov , M. Grozeva, B. Ostrowska, "Preliminary study of surface modification of 3D Poly (ϵ - caprolactone) scaffolds by ultrashort laser irradiation", Journal of Physics: Conference Series, vol. 682, No. 1, art. No. 012006, 2016, Q4	12
Г7	6. N. Nedyalkov, N. Stankova, M. Koleva, R. Nikov, M. Grozeva, E. Iordanova, G. Yankov , L. Aleksandrov, R. Iordanova, D. Karashanova, "OPTICAL PROPERTIES MODIFICATION OF GOLD DOPED GLASS INDUCED BY NANOSECOND LASER RADIATION AND ANNEALING", Optical Materials, vol. 75, pp. 646-653, 2018, IF = 2.687 , Q2 в Web of Science и Q1 в Scopus	25

Г7	7. N. Nedyalkov, N. Stankova, M. Koleva, R. Nikov, P. Atanasov, M. Grozeva, E. Iordanova, G. Yankov , L. Aleksandrov, R. Iordanova, D. Karashanova, "Optical properties modification induced by laser radiation in noble metal doped glasses", Journal of Physics: Conference Series, vol. 992, No. 1, art. No. 012047, 2018, Q4 в Scopus	12
Г7	8. N. Nedyalkov, M. Koleva, R. Nikov, N. Stankova, E. Iordanova, G. Yankov , L. Alexandrov, R. Iordanova, "Tuning optical properties of noble metal nanoparticle-composed glasses by laser radiation", Applied Surface Science, vol. 463, pp. 968-975, 2019, IF = 6.182, Q1 в Web of Science и Q1 в Scopus	25
Г7	8. Ro. Nikov, N. Nedyalkov, M. Koleva, N. Stankova, E. Iordanova, G. Yankov , L. Aleksandrov, R. Iordanova, "Femtosecond laser modification of the optical properties of glass containing noble-metal nanoparticles", Journal of Physics: Conference Series, vol. 1492, No.1, art. No. 012058, 2020, Q4 в Scopus	12
Г7	10. L. Dimowa, I. Piroeva, S. Atanasova-Vladimirova, N. Petrova, V. Ganey, R. Titorenkova, G. Yankov , T. Petrov, B. Shivachev, "Synthesis, structural, thermal and optical properties of TeO ₂ -Bi ₂ O ₃ -GeO ₂ -Li ₂ O glasses", Optical Materials, vol. 60, pp. 577-583, 2016, IF = 2.238 (2.183), Q2 в Web of Science и Q1 в Scopus	25
Г7	11. I. K. Kostadinov, K. A. Temelkov, L. T. Popova, S. I. Slaveeva, G. P. Yankov , "Diffraction-limited high-power master oscillator – power amplifier system oscillating in visible spectral range on copper atomic transitions for precise material micromachining", Journal of Physics: Conference Series, vol. 2487, No. 1, 012008, 2023. SJR 0.210.	10
Г7	12. I. K. Kostadinov, K. A. Temelkov, D. N. Astadjov, S. I. Slaveeva, G. P. Yankov , N. V. Sabotinov, "High-power copper bromide vapor laser", Optics Communications, vol. 501, art. No. 127363, 2021 IF = 2.335, Q3 в Web of Science и Q2 в Scopus	20
Г7	13. K. Kostadinov, G. P. Yankov , L. T. Popova, S. I. Slaveeva, Yu. I. Fedchenko, K. A. Temelkov, "High-power high-beam-quality sealed-off master oscillator – power amplifier system oscillating in the middle infrared spectral range on strontium atomic transitions", Journal of Physics: Conference Series, vol. 1859, No. 1, art. No. 012054, 2021, SJR 0.210	10
Г7	14. K. Kostadinov, D. N. Astadjov, G. P. Yankov , L. T. Popova, S. I. Slaveeva, Yu. I. Fedchenko, K. A. Temelkov, "High-beam-quality sealed-off master oscillator–power amplifier system	10

	oscillating in visible spectral range on copper atomic transitions for micromachining in science and technology”, Journal of Physics: Conference Series, vol. 1859. No. 1, art. No. 012056, 2021, SJR 0.210	
Г7	15. I. K. Kostadinov, K. A. Temelkov, G. P. Yankov , B. L. Ivanov, “High-beam-quality sealed-off laser system oscillating in middle infrared spectral range on strontium atomic transitions”, Optical and Quantum Electronics, vol. 52, art. No. 94 (8pp), 2020, IF = 1.842, Q2 в Web of Science и Q2 в Scopus	20
Г7	Общ брой точки Г7	241
Г9	9. Изобретение, патент или полезен модел, за което е издаден защитен документ по надлежния ред	25
Г9	1. I. K. Kostadinov, D. N. Astadjov, K. A. Temelkov, G. P. Yankov , “Gas-discharge laser”, Published Applications for Inventions, № 67473 B1 from 15.11.2022 (reg. № 113173 from 23.06.2020).	25
Г9	Общ брой точки Г9	25
Г	Общ брой точки по показател Г	266
Д	11. Цитирания в научни издания, монографии, колективни томове и патенти, реферирани и индексирани в световноизвестни бази данни с научна информация (Web of Science и Scopus)	
	<p>L. Dimowa, I. Piroeva, S. Atanasova-Vladimirova, N. Petrova, V. Ganev, R. Titorenkova, G. Yankov, T. Petrov, B. Shivachev, “Synthesis, structural, thermal and optical properties of TeO₂–Bi₂O₃–GeO₂–Li₂O glasses“, Optical Materials, vol. 60, pp. 577-583, 2016, IF = 2.238 (2.183), Q2 в Web of Science и Q1 в Scopus</p> <p>Цитирания:</p> <p>1.Blessy Kamalam, E., Manikandan, N. Review—Recent Advances in Bismuth Tellurite Glasses for Photonic and Radiation Shielding Applications (2023) ECS Journal of Solid State Science and Technology, 12 (7), art. no. 076007, . DOI: 10.1149/2162-8777/ace6d8</p> <p>2.Brand, L., Anjos, V., Bell, M.J.V. Optical and structural analysis of tellurite matrices with different modifiers (2023) Optical Materials, 138, art. no. 113470, . DOI: 10.1016/j.optmat.2023.113470</p>	9x2=18

	<p>3.Siripuram, R., Satya Gopal Rao, P., Sripada, S. Comparative studies of structural and optical properties of Nb2O5–Sb2O3–TeO2 glass and glass-ceramics (2022) Physics and Chemistry of Glasses: European Journal of Glass Science and Technology Part B, 63 (3), pp. 65-85. DOI: 10.13036/17533562.63.3.02</p> <p>4.Zhou, D., Jiang, Q., Chen, C., Zeng, H., Chen, D. Spectroscopic properties of Er³⁺-doped lithium-modified bismuth tellurite glasses for broadband near-infrared emission (2022) Journal of Non-Crystalline Solids, 583, art. no. 121468 DOI: 10.1016/j.jnoncrysol.2022.121468</p> <p>5.Boukhris, I., Kebaili, I., Sayyed, M.I., Askin, A., Rammah, Y.S. Linear, nonlinear optical and photon attenuation properties of La³⁺ doped tellurite glasses (2020) Optical Materials, 108, art. no. 110196 DOI: 10.1016/j.optmat.2020.110196</p> <p>6.He, J., Zhan, H., Lin, A. Structural property of bismuth-doped tellurite glasses for nonlinear and Raman fiber applications (2019) Optical Materials, 96, art. no. 109280 DOI: 10.1016/j.optmat.2019.109280</p> <p>7.Bachvarova-Nedelcheva, A., Iordanova, R., Ganev, S., Dimitriev, Y. Glass formation and structural studies of glasses in the TeO₂ – ZnO – Bi₂O₃ – Nb₂O₅ system (2019) Journal of Non-Crystalline Solids, 503-504, pp. 224-231. DOI: 10.1016/j.jnoncrysol.2018.09.048</p> <p>8.Siripuram, R., Rao, P.S.G., Sripada, S. Influence of nano crystalline behavior of Nb₂O₅- Sb₂O₃- TeO₂glass ceramics on structural and thermal studies (2019) Materials Today: Proceedings, 46, pp. 6344-6357. DOI: 10.1016/j.matpr.2020.05.818</p> <p>9.Feng, C.-R., Jian, J., Chen, X.-H., Du, Q., Wang, L. Investigations on the Local Structures and the Spin Hamiltonian Parameters for Cu²⁺ in (90-x)TeO₂-10GeO₂-xWO₃ Glasses (2017) Zeitschrift fur Naturforschung - Section A Journal of Physical Sciences, 73 (1), pp. 5-11. DOI: 10.1515/zna-2017-0308</p>	
	<p>N. Nedyalkov, M. Koleva, R. Nikov, N. Stankova, E. Iordanova, G. Yankov, L. Alexandrov, R. Iordanova, “Tuning optical properties of noble metal nanoparticle-composed glasses by laser radiation”,</p>	<p>9x2=18</p>

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	<p>Nanoparticles as components of electrochemical sensing platforms for the detection of petroleum pollutants: A review (2019) TrAC - Trends in Analytical Chemistry, 118, pp. 194-206. DOI: 10.1016/j.trac.2019.05.045</p> <p>9.Meng, G., Wang, X., Hu, H., Zhao, H., Jiang, T., Ren, Y., Lu, C. Cu2O-Ag nanocomposites with tunable optical property (2019) Materials Research Express, 6 (10), art. no. 105080, . DOI: 10.1088/2053-1591/ab3cb5</p>	
	<p>N. Nedyalkov, N. Stankova, M. Koleva, R. Nikov, L. Alexandrov, R. Iordanova, E. Iordanova, G. Yankov, "Laser processing of noble metal doped glasses by femto- and nanosecond laser pulses", Applied Surface Science, vol. 475, pp. 479-486, 2019, IF = 6.182, Q1 в Web of Science и Q1 в Scopus</p> <p>Цитирания:</p> <p>1.Fukushima, S., Hidai, H., Itoh, S., Matsusaka, S. precipitation of gold nanoparticles via gold sphere movement driven by laser (2022) Nanotechnology, 33 (45), art. no. 455202, . DOI: 10.1088/1361-6528/ac8556</p> <p>2.Xu, L., Zhang, S., Huang, L., Yang, Y., Tao, H., Zhu, J., Yang, C., Li, S., Jin, R., Dong, X. A novel CoxNi1-xP/fs-Si self-supporting electrodes manufactured via femtosecond laser for highly efficient hydrogen evolution reaction (2022) Surfaces and Interfaces, 32, art. no. 102173 DOI: 10.1016/j.surfin.2022.102173</p> <p>3.Kawamura, H., Okuda, R., Matsusaka, S., Nomoto, K., Kodaka, H., Hidai, H., Chiba, A., Morita, N. Fine hole drilling of alkali-containing silicate glass substrate using preferential penetration of etchants around silver precipitates (2022) Precision Engineering, 76, pp. 141-148. DOI: 10.1016/j.precisioneng.2022.03.017</p> <p>4.Zhao, H., Cun, Y., Bai, X., Xiao, D., Qiu, J., Song, Z., Liao, J., Yang, Z. Entirely Reversible Photochromic Glass with High Coloration and Luminescence Contrast for 3D Optical Storage (2022) ACS Energy Letters, 7, pp. 2060-2069. DOI: 10.1021/acseenergylett.2c00574</p> <p>5.Orazi, L., Romoli, L., Schmidt, M., Li, L. Ultrafast laser manufacturing: from physics to industrial applications (2021) CIRP Annals, 70 (2), pp. 543-566. Cited 31 times.</p>	<p>10x2=20</p>

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	<p>N. Nedyalkov, N. Stankova, M. Koleva, R. Nikov, M. Grozeva, E. Iordanova, G. Yankov, L. Aleksandrov, R. Iordanova, D. Karashanova, "OPTICAL PROPERTIES MODIFICATION OF GOLD DOPED GLASS INDUCED BY NANOSECOND LASER RADIATION AND ANNEALING", Optical Materials, vol. 75, pp. 646-653, 2018, IF = 2.687, Q2 в Web of Science и Q1 в Scopus</p> <p>Цитирания:</p> <p>1.Fukushima, S., Hidai, H., Itoh, S., Matsusaka, S. Local control of optical absorption properties of glass using precipitation of gold nanoparticles via gold sphere movement driven by laser (2022) Nanotechnology, 33 (45), art. no. 455202, .</p>	<p>6x2=12</p>

	<p>DOI: 10.1088/1361-6528/ac8556</p> <p>2.Schlotthauer, T., Nolan, D., Middendorf, P. Influence of short carbon and glass fibers on the curing behavior and accuracy of photopolymers used in stereolithography (2021) Additive Manufacturing, 42, art. no. 102005</p> <p>3.Babich, E., Kaasik, V., Reduto, I., Scherbak, S., Lipovskii, A. Kinetics of Nanoparticles Formation Under UV, VIS and IR Nanosecond Laser Irradiation of a Silver-Ions-Enriched Glass (2021) Journal of Laser Micro Nanoengineering, 16 (2), pp. 88-93 DOI: 10.2961/jlmn.2021.02.2003</p> <p>4.Moriceau, J., Houizot, P., Lorenc, M., Rouxel, T. Healing of cracks by green laser irradiation in a nanogold particles glass matrix composite (2019) Journal of Non-Crystalline Solids, 503-504, pp. 115-119. DOI: 10.1016/j.jnoncrysol.2018.09.036</p> <p>5.Fu, X., Li, Y., Li, X., Tian, R., Yin, L., Zhang, J. Laser bonding of glass and glass with constant temperature output (2018) Proceedings - 2018 19th International Conference on Electronic Packaging Technology, ICEPT 2018, art. no. 8480752, pp. 1084-1088. DOI: 10.1109/ICEPT.2018.8480752</p> <p>6.Aparimita, A., Sripan, C., Ganesan, R., Jena, S., Naik, R. Influence of thermal annealing on optical and structural properties change in Bi-doped Ge₃₀Se₇₀ thin films (2018) Phase Transitions, 91 (8), pp. 872-886. DOI: 10.1080/01411594.2018.1506882</p>	
	Общ брой точки по показател Д	68