

# **Олег Михайлович Саркисов**



**(19.02.1937-16.09.2012)**

Скончался крупнейший отечественный ученый, профессор, доктор физико-математических наук, заместитель директора по научной работе Института химической физики им. Н.Н. Семенова О.М. Саркисов.

Ученый с мировым именем, основатель фемтохимии в России, выдающийся специалист в области динамики и кинетики элементарных реакций, лазерной спектроскопии и оптической микроскопии с широчайшим диапазоном научных интересов Олег Михайлович был одним из наиболее ярких ученых нашего Института.

До последних дней Олег Михайлович преданно и беззаветно служил науке, которая всегда была главным делом его жизни. Его крайне заинтересованное и одновременно бескомпромиссное отношение к результатам научных исследований было

одним из существенных факторов, определявших высокий уровень работ нашего Института. Без преувеличения Олега Михайловича можно было назвать научной совестью нашего Института.

Собственные работы Олега Михайловича всегда определяли передний край исследований не только отечественной, но и мировой науки. Он был одним из пионеров применения методов лазерной спектроскопии в исследовании кинетики химических реакций. Им созданы уникальные фемтосекундные технологии мирового уровня с нанометровым пространственным и фемтосекундным временным разрешением для изучения структурно-динамических закономерностей в различных системах. Впервые в мире им создана установка, сочетающая множество "лазерных скальпелей" с "голографическим лазерным пинцетом". Олег Михайлович является создателем нового, имеющего мировой приоритет метода исследования элементарных реакций — время разрешенной внутристационарной лазерной спектроскопии, позволившей на несколько порядков увеличить чувствительность абсорбционной спектроскопии. С помощью этого метода был выполнен цикл фундаментальных исследований, позволивший предложить новые пути уменьшения выбросов оксидов азота в энергосиловых установках. Результаты этих исследований были реализованы при разработке новой технологии глубокой очистки дымовых газов теплоэлектростанций от оксидов азота с использованием селективного некатализитического восстановления. За эти исследования Олегу Михайловичу присуждена премия Правительства Российской Федерации в области науки и техники за 2004 год.

Обладая необычайно широкими научными интересами, Олег Михайлович в последние годы активно занимался применением фемтосекундных методов к исследованию биологических объектов. Эти исследования вызывали активный интерес среди биологов, высоко ценивших

эти результаты и отмечавших их большое влияние на современные биологические исследования.

Олег Михайлович вел активную преподавательскую работу в Московском физико-техническом институте. Окруженный молодыми сотрудниками и аспирантами, он постоянно генерировал новые идеи, которые с энтузиазмом воплощались в жизнь. Он воспитал большую группу талантливых специалистов, работающих сейчас как в России, так и за рубежом. Олег Михайлович был председателем секции "Химическая динамика" Научного совета РАН по химической физике, членом Научного совета РАН по химическому строению и реакционной способности, заместителем председателя докторского Совета при ИХФ РАН, членом Ученого совета ИХФ РАН, членом редколлегий журналов "Химическая физика" и "Химия высоких энергий".

Олег Михайлович, необыкновенно яркий и творческий человек, ушел из жизни, полный жизненных планов, очень многое не успев доделать, додумать, организовать. Его уход — большая потеря для отечественной и мировой науки. И огромная, невосполнимая потеря для нашего Института и особенно для всех тех, кто близко знал Олега Михайловича и работал рядом с ним долгие годы.

Источник: ХИМИЧЕСКАЯ ФИЗИКА,, 2013, том 32, № 2, с. 95-96

БО1: 10.7868/80207401X13020088 <http://naukarus.com/pamyati-olega-mihaylovicha-sarkisova>

Obituary in the [Chemical Journal of Armenia](#)

## Список основных публикаций:

1. SHAKHOV, AM; ASTAFIEV, AA; PLUTENKO, DO; SARKISOV, OM; SHUSHIN, AI; NADTOCHENKO, VA.  
FEMTOSECOND OPTICAL TRAP-ASSISTED NANOPATTERNING THROUGH MICROSFERES BY A SINGLE TI:SAPPHIRE OSCILLATOR  
JOURNAL OF PHYSICAL CHEMISTRY C 119(22), 12562-12571 (2015)
2. SMITIENKO, O; NADTOCHENKO, V; FELDMAN, T; BALATSKAYA, M; SHELAEV, I; GOSTEV, F; SARKISOV, O; OSTROVSKY, M.  
FEMTOSECOND LASER SPECTROSCOPY OF THE RHODOPSIN PHOTOCHROMIC REACTION: A CONCEPT FOR ULTRAFAST OPTICAL MOLECULAR SWITCH CREATION (ULTRAFAST REVERSIBLE PHOTOREACTION OF RHODOPSIN)  
MOLECULES 19(11), 18351-18366 (2014)
3. SHELAEV, IV; MOZGOVAYA, MN; SMITIENKO, OA; GOSTEV, FE; FEL'DMAN, TB; NADTOCHENKO, VA; SARKISOV, OM; OSTROVSKII, MA.  
FEMTOSECOND DYNAMICS OF PRIMARY PROCESSES IN VISUAL PIGMENT RHODOPSIN  
RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY B 8(4), 510-517 (2014)
4. LYGO, ON; SHELAEV, IV; GOSTEV, FE; NEKIPEROVA, TD; KHODOT, EN; TSENTALOVICH, YP; TITOV, AA; KUZMIN, VA; SARKISOV, OM.  
EFFECT OF THE EXCITATION WAVELENGTH AND THE STRUCTURE OF NITRATED 1,2-DYHYDROQUINOLINES ON DYNAMICS OF PRIMARY PHOTOPHYSICAL AND PHOTOCHEMICAL PROCESSES  
HIGH ENERGY CHEMISTRY 47(5), 230-236 (2013)
5. NADTOCHENKO, VA; LEVIN, PP; ZAICHENKO, NL; GOSTEV, FE; SHELAEV, IV; SHIENOK, AI; KOL'TSOVA, LS; SARKISOV, OM; BERLIN, AA.  
SPECTRAL AND KINETIC PARAMETERS OF TRANSIENT SPECIES IN THE PHOTOLYSIS OF NAPHTHYLIDENEIMINOSPIRONAPHTHOPYRAN BY EXCITATION AT DIFFERENT WAVELENGTHS: NANO- AND FEMTOSECOND

- LASER PHOTOLYSIS  
HIGH ENERGY CHEMISTRY 47(3), 120-126 (2013)
6. SAKOVICH, RA; POLYAK, BM; GULARYAN, SK; ROMANOV, AN;  
SVETLICHNYI, VY; SARKISOV, OM.  
QUANTUM CHEMICAL SIMULATION OF THE INTERACTION OF MEMBRANE  
FLUORESCENT PROBE 4-DIMETHYLAMINOCHALCONE WITH HYDROXY  
GROUPS OF THE ENVIRONMENT  
RUSSIAN CHEMICAL BULLETIN 62(5), 1143-1155 (2013)
7. DOBRETSOV, G; POLYAK, B; SMOLINA, N; BABUSHKINA, T;  
SYREJSCHIKOVA, T; KLIMOVA, T; SVERBIL, V; PEREGUDOV, A;  
GRYZUNOV, Y; SARKISOV, O.  
INTERACTION OF A FLUORESCENT PROBE, CAPIDAN, WITH HUMAN SERUM  
ALBUMIN  
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY 251, 134-  
140 (2013)
8. ASTAFIEV, AA; SHAKHOV, AM; SARKISOV, OM; NADTOCHENKO, VA.  
MICROSTRUCTURING OF POLYMER FILMS BY FEMTOSECOND PULSES  
THROUGH OPTICALLY TRAPPED POLYSTYRENE MICROSPHERES  
QUANTUM ELECTRONICS 43(4), 361-364 (2013)
9. AIBOUSHEV, A; GOSTEV, F; SHELAEV, I; KOSTROV, A; KANAEV, A;  
MUSEUR, L; TRAORE, M; SARKISOV, O; NADTOCHENKO, V.  
SPECTRAL PROPERTIES OF THE SURFACE PLASMON RESONANCE AND  
ELECTRON INJECTION FROM GOLD NANOPARTICLES TO TIO2 MESOPOROUS  
FILM: FEMTOSECOND STUDY  
PHOTOCHEMICAL & PHOTOBIOLOGICAL SCIENCES 12(4), 631-637 (2013)
10. PLUTENKO, D. A.; SARKISOV, O. M.; NADTOCHENKO, V. A..  
OPTICAL TRAPPING OF MICROPARTICLES FROM A STREAM IN VACUUM  
NANOTECHNOL. RUSS. 8, 664 (2013)
11. KRIVOKHARCHENKO, A; KARMINIAN, A; SARKISOV, O; BADER, M;  
CHIOU, A; SHAKHBAZYAN, A.  
LASER FUSION OF MOUSE EMBRYONIC CELLS AND INTRA-EMBRYONIC  
FUSION OF BLASTOMERES WITHOUT AFFECTING THE EMBRYO INTEGRITY  
PLOS ONE 7(12), - (2012)
12. SEMENOV, AY; SHELAEV, IV; GOSTEV, FE; MAMEDOV, MD; SHUVALOV,  
VA; SARKISOV, OM; NADTOCHENKO, VA.  
PRIMARY STEPS OF ELECTRON AND ENERGY TRANSFER IN PHOTOSYSTEM I:  
EFFECT OF EXCITATION PULSE WAVELENGTH  
BIOCHEMISTRY-MOSCOW 77(9), 1011-1020 (2012)
13. NADTOCHENKO, VA; SMITIENKO, OA; FELDMAN, TB; MOZGOVAYA, MN;  
SHELAEV, IV; GOSTEV, FE; SARKISOV, OM; OSTROVSKY, MA.  
CONICAL INTERSECTION PARTICIPATION IN FEMTOSECOND DYNAMICS OF  
VISUAL PIGMENT RHODOPSIN CHROMOPHORE CIS-TRANS  
PHOTOISOMERIZATION  
DOKLADY BIOCHEMISTRY AND BIOPHYSICS 446(1), 242-246 (2012)
14. PASCHENKO, VZ; GOROKHOV, VV; KORVATOVSKIY, BN; BOCHAROV, EA;  
KNOX, PP; SARKISOV, OM; THEISS, C; EICHLER, HJ; RENGER, G; RUBIN,  
AB.  
THE RATE OF Q(X)-> Q(Y) RELAXATION IN BACTERIOCHLOROPHYLLS OF  
REACTION CENTERS FROM RHODOBACTER SPHAEROIDES DETERMINED BY  
KINETICS OF THE ULTRAFAST CAROTENOID BANDSHIFT  
BIOCHIMICA ET BIOPHYSICA ACTA-BIOENERGETICS 1817(8), 1399-1406 (2012)
15. KHIMICH, MN; NADTOCHENKO, VA; POPOV, LD; BURLOV, AS; IVANOV, VL;  
DENISOV, NN; GOSTEV, FE; SHELAEV, IV; SARKISOV, OM; UZHINOV, BM.  
FEMTOSECOND DYNAMICS OF EXCITED-STATE INTRAMOLECULAR PROTON  
TRANSFER IN O-TOSYLMINOBENZALDEHYDE  
HIGH ENERGY CHEMISTRY 46(4), 247-252 (2012)

- 16. SARKISOV, OM.**  
NEW DIRECTIONS OF FEMTOCHEMISTRY AND FEMTOBIOLOGY  
RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY B 6(4), 458-470 (2012)
- 17. BARBASHOV, YV; ZALESSKII, AD; BEREZUTSKAYA, MA; MAKSIMOV, GV; RUBIN, AB; SARKISOV, OM; NADTOCHENKO, VA.**  
NONLINEAR OPTICAL EFFECTS OF NEAR-IR FEMTOSECOND LASER RADIATION ON THE MORPHOLOGY AND STRUCTURE OF A NERVE CELL IN THE FIELD OF AN OPTICAL TRAP  
RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY B 6(3), 362-367 (2012)
- 18. ZALESSKII, AD; DANIL'CHENKO, NA; BARBASHOV, YV; ZAPADINSKII, BI; SARKISOV, OM.**  
MULTIPHOTON POLYMERIZATION WITH THE HOLOGRAPHIC CONTROL OF FEMTOSECOND AND CONTINUOUS LASER RADIATION  
RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY B 6(3), 357-361 (2012)
- 19. LYGO, ON; SHELAEV, IV; GOSTEV, FE; NEKIPELOVA, TD; KHODOT, EN; KUZMIN, VA; SARKISOV, OM.**  
DYNAMICS OF CARBOCATION FORMATION IN THE PHOTOLYSIS OF 1,2,2,3-TETRAMETHYL-1,2-DIHYDROQUINOLINE IN ALCOHOLS  
HIGH ENERGY CHEMISTRY 46(1), 34-37 (2012)
- 20. KOSTROV, AN; AIBUSHEV, AV; GOSTEV, FE; SHELAEV, IV; SARKISOV, OM; NIZOVA, GV; DENISOV, NN; KANAEV, AV; NADTOCHENKO, VA.**  
RELAXATION OF PHOTOEXCITED GOLD NANOPARTICLES IN AN AQUEOUS COLLOID AND MESOPOROUS TIO<sub>2</sub> FILMS: INFLUENCE OF THE INTERFACE  
HIGH ENERGY CHEMISTRY 45(5), 428-433 (2011)
- 21. SHELAEV, IV; GOSTEV, FE; VISHNEV, MI; SHKUROPATOV, AY; PTUSHENKO, VV; MAMEDOV, MD; SARKISOV, OM; NADTOCHENKO, VA; SEMENOV, AY; SHUVALOV, VA.**  
P-680 (PD1PD2) AND CHL(D1) AS ALTERNATIVE ELECTRON DONORS IN PHOTOSYSTEM II CORE COMPLEXES AND ISOLATED REACTION CENTERS  
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY B-BIOLOGY 104(1-2), 44-50 (2011)
- 22. SHELAEV, I; MIRONOV, V; RUSANOV, A; GOSTEV, F; BOCHENKOVA, A; SARKISOV, O; NEMUKHIN, A; SAVITSKY, A.**  
THE ORIGIN OF RADIATIONLESS CONVERSION OF THE EXCITED STATE IN THE KINDLING FLUORESCENT PROTEIN (KFP): FEMTOSECOND STUDIES AND QUANTUM MODELING  
LASER PHYSICS LETTERS 8(6), 469-474 (2011)
- 23. ALDOSHIN, SM; YUR'EVA, A; SANINA, NA; KRAYUSHKIN, MM; TSYGANOV, DV; GOSTEV, FE; SHELAEV, IV; SARKISOV, OM; NADTOCHENKO, VA.**  
FEMTOSECOND DYNAMICS OF PHOTOCYCLOLIZATION OF 1-[(4-{5-[4-CHLOROMETHYL-2,5-DIMETHYL-3-THIENYL]-2-OXO-1,3-DIOXOL-4-YL}-2,5-DIMETHYL-3-THIENYL)METHYL]PYRIDINIUM CHLORIDE  
RUSSIAN CHEMICAL BULLETIN 60(6), 1118-1127 (2011)
- 24. SARKISOV, OM.**  
FEMTOSECOND LASERS IN CHEMISTRY AND BIOLOGY  
HERALD OF THE RUSSIAN ACADEMY OF SCIENCES 81(3), 261-264 (2011)
- 25. SHUVALOV, VA; SARKISOV, OM.**  
FEMTOBIOLOGY: PRIMARY PHOTOSYNTHESIS PROCESSES  
HERALD OF THE RUSSIAN ACADEMY OF SCIENCES 81(3), 265-270 (2011)
- 26. KOSTROV, AN; AYBUSHEV, AV; GOSTEV, FE; SHELAEV, IV; SARKISOV, OM; DENISOV, NN; KHUDYAKOV, DV; NADTOCHENKO, VA.**  
FEMTOSECOND PULSE EXCITATION OF VIBRATIONAL WAVE PACKETS IN CHLOROFORM: THE EFFECT OF GOLD NANOPARTICLES  
HIGH ENERGY CHEMISTRY 45(3), 250-257 (2011)
- 27. ROMANOV, AN; GULARYAN, SK; POLYAK, BM; SAKOVICH, RA; DOBRETSOV, GE; SARKISOV, OM.**

ELECTRONICALLY EXCITED STATES OF MEMBRANE FLUORESCENT PROBE 4-DIMETHYLAMINOCHALCONE. RESULTS OF QUANTUM CHEMICAL CALCULATIONS

PHYSICAL CHEMISTRY CHEMICAL PHYSICS 13(20), 9518-9524 (2011)

28. BARBASHOV, YU.V.; ZALESSKII, A.D.; AIBUSHEV, A.V.; SARKISOV, O.M.; RADTSIG, M.A.; KHTEL', I.A.; KOKSHAROVA, O.A.; NADTOCHENKO, V.A.. FEMTOSECOND OPTOPERFORATION OF THE CELL WALL OF CYANOBACTERIUM ANABAENA SP. PCC 7120 IN THE PRESENCE OF GOLD NANOPARTICLES NANOTECHNOLOGIES IN RUSSIA 6(9-10), 668 (2011)
29. AIBOUSHEV, A; ASTAFIEV, A; LOZOVIK, Y; SARKISOV, O; NADTOCHENKO, V. TWO-PHOTON LUMINESCENCE AS A PROBE OF LOCAL FIELD ENHANCEMENT IN HOT SPOT OF PLASMONIC NANOPARTICLES IN TITANIUM DIOXIDE MATRIX ICONO 2010: INTERNATIONAL CONFERENCE ON COHERENT AND NONLINEAR OPTICS 7993, - (2011)
30. KOSTROV, A; AIBOUSHEV, A; GOSTEV, F; SHELAEV, I; SARKISOV, O; DENISOV, N; KHUDYAKOV, D; NADTOCHENKO, V. THE EXCITATION OF VIBRATIONAL WAVE PACKETS IN CHLOROFORM BY FEMTOSECOND PULSES: EFFECT OF GOLD NANOPARTICLES ICONO 2010: INTERNATIONAL CONFERENCE ON COHERENT AND NONLINEAR OPTICS 7993, - (2011)
31. AIBOUSHEV, A.; ASTAFIEV, A.; SARKISOV, O.M.; NADTOCHENKO, V.A.. AU/TIO<sub>2</sub> NANOCOMPOSITES WITH HIGH CONCENTRATED "HOT SPOTS" UNDER NEAR IR FEMTOSECOND PULSED EXCITATION JOURNAL OF PHYSICS: CONFERENCE SERIES 291, (2011)
32. BAKHSHIEV, NG; GULARYAN, SK; DOBRETSOV, GE; KIRILLOVA, AY; SARKISOV, OM; SVETLICHNYI, VY. NATURE OF THE INFLUENCE OF A SOLVENT ON THE FLUORESCENCE QUANTUM YIELD OF SOLUTIONS OF THE FLUORESCENT PROBE 4-DIMETHYLAMINOCHALCONE OPTICS AND SPECTROSCOPY 109(6), 913-916 (2010)
33. MOZGOVAYA, MN; SMITIENKO, OA; SHELAEV, IV; GOSTEV, FE; FELDMAN, TB; NADTOCHENKO, VA; SARKISOV, OM; OSTROVSKY, MA. PHOTOCHROMISM OF VISUAL PIGMENT RHODOPSIN ON THE FEMTOSECOND TIME SCALE: COHERENT CONTROL OF RETINAL CHROMOPHORE ISOMERIZATION DOKLADY BIOCHEMISTRY AND BIOPHYSICS 435(1), 302-306 (2010)
34. KHIMICH, MN; GOSTEV, FE; SHELAEV, IV; SARKISOV, OM; BIRGEN, EA; BOLOTIN, BM; UZHINOV, BM. FEMTOSECOND DYNAMICS OF INTRAMOLECULAR PHOTOINDUCED PROTON TRANSFER IN N-SUBSTITUTED 2-(2-AMINOPHENYL)-4H-3,1-BENZOAZIN-4-ONES HIGH ENERGY CHEMISTRY 44(6), 482-491 (2010)
35. PASCHENKO, VZ; GOROKHOV, VV; KORVATOVSKY, BN; KNOX, PP; ZAKHAROVA, NI; TEISS, C; EICHLER, HJ; RENGER, G; SARKISOV, OM; RUBIN, AB. ELECTROCHEMICAL SHIFT OF THE CAROTENOID MOLECULE ABSORPTION BAND AS AN INDICATOR OF PROCESSES OF ENERGY MIGRATION IN THE REACTION CENTER OF RHODOBACTER SPAEROIDES DOKLADY BIOCHEMISTRY AND BIOPHYSICS 434(1), 257-261 (2010)
36. SHELAEV, IV; GOSTEV, FE; MAMEDOV, MD; SARKISOV, OM; NADTOCHENKO, VA; SHUVALOV, VA; SEMENOV, AY. FEMTOSECOND PRIMARY CHARGE SEPARATION IN SYNECHOCYSTIS SP PCC

- 6803 PHOTOSYSTEM I  
BIOCHIMICA ET BIOPHYSICA ACTA-BIOENERGETICS 1797(8), 1410-1420 (2010)
37. MOZGOVAYA, M. N.; SMITIENKO, O. A.; SHELAEV, I. V.; GOSTEV, F. E.;  
FEL'DMAN, T. B.; NADTOCHENKO, V. A.; SARKISOV, O. M.; OSTROVSKY, M.  
A..  
PHOTOCHROMISM OF VISUAL PIGMENT RHODOPSIN IN FEMTOSECOND TIME  
SCALE: COHERENT CONTROL OF RETINAL CHROMOPHORE  
PHOTOISOMERIZATION  
DOKLADY AKADEMII NAUK 435(2), 262 (2010)
38. SMITIENKO, OA; MOZGOVAYA, MN; SHELAEV, IV; GOSTEV, FE; FELDMAN,  
TB; NADTOCHENKO, VA; SARKISOV, OM; OSTROVSKY, MA.  
FEMTOSECOND FORMATION DYNAMICS OF PRIMARY PHOTOPRODUCTS OF  
VISUAL PIGMENT RHODOPSIN  
BIOCHEMISTRY-MOSCOW 75(1), 25-35 (2010)
39. BUCHANOV, VV; DERZHAVIN, VA; ZALESSKY, AD; RESHETOV, IV;  
SARKISOV, OM; SHUSHIN, AI.  
OPTICAL MANIPULATORS OF MICROPARTICLES USING FEMTOSECOND LASER  
RADIATION  
QUANTUM ELECTRONICS 40(5), 446-450 (2010)
40. SMITIENKO, O.A.; MOZGOVAYA, M.N.; SHELAEV, I.V.; GOSTEV, F.E.;  
FELDMAN, T.B.; NADTOCHENKO, V.A.; SARKISOV, O.M.; OSTROVSKY, M.A..  
FEMTOSECOND DYNAMICS OF PRIMARY PHOTOPRODUCT FORMATION OF  
VISUAL PIGMENT RHODOPSIN  
BIOCHEMISTRY (MOSCOW) 75(1), 34 (2010)
41. MOZGOVAYA, M. N.; SMITIENKO, O. A.; SHELAEV, I. V.; GOSTEV, F. E.;  
FELDMAN, T. B.; NADTOCHENKO, V. A.; SARKISOV, O. M.; OSTROVSKIY, M.  
A..  
PHOTOCHROMISM OF VISUAL PIGMENT RHODOPSIN IN FEMTOSECOND TIME  
SCALE: COHERENT GOVERNING PHOTOISOMERIZATION OF RETINAL  
CHROMOPHORE  
DAN (RUS.) 435(2), 1 (2010)
42. GULARYAN, SK; SVETLICHNYI, VY; ZOLOTAVIN, PN; DOBRETSOV, GE;  
KIRILLOVA, AY; ASTAF'EV, AA; SARKISOV, OM; BAKHSHIEV, NG.  
ESTIMATION OF THE NUMBER OF POLAR MOLECULES IN A SOLVATE SHELL  
OF A FLUORESCENT PROBE 4-DIMETHYLAMINOCHALCONE  
OPTICS AND SPECTROSCOPY 106(5), 660-665 (2009)
43. FROLOV, AK; GOSTEV, FE; SHELAEV, AI; SHIENOK, AI; KOL'TSOVA, LS;  
ZAICHENKO, NL; SARKISOV, OM.  
FEMTOCHEMISTRY OF SALICYLIDENEAMINOSPIRONAPHTHOXAZINES,  
BIFUNCTIONAL PHOTOCHROMIC COMPOUNDS  
RUSSIAN CHEMICAL BULLETIN 58(4), 796-804 (2009)
44. AIBOUSHEV, AV; ASTAFIEV, AA; LOZOVIK, YE; MERKULOVA, SP;  
NADTOCHENKO, VA; SARKISOV, OM; WILLANDER, M.  
ENHANCED LUMINESCENCE AND TWO-PHOTON ABSORPTION OF SILVER  
NANO-CLUSTERS  
PHYSICA STATUS SOLIDI C: CURRENT TOPICS IN SOLID STATE PHYSICS, VOL  
6, SUPPL 1 6, S162-S166 (2009)
45. NADTOCHENKO, VA; NIKANDROV, VV; GORENBERG, AA; KARLOVA, MG;  
LUKASHEV, EP; SEMENOV, AY; BUKHARINA, NS; KOSTROV, AN;  
PERMENOVA, EP; SARKISOV, OM.  
NANOPHOTOBIOCATALYSTS BASED ON MESOPOROUS TITANIUM DIOXIDE  
FILMS CONJUGATED WITH ENZYMES AND PHOTOSYNTHETIC REACTION  
CENTERS OF BACTERIA  
HIGH ENERGY CHEMISTRY 42(7), 591-593 (2008)
46. SHELAEV, IV; GOSTEV, FE; NADTOCHENKO, VA; SHKUROVATOV, AY;  
ZABELIN, AA; MAMEDOV, MD; SEMENOV, AY; SARKISOV, OM; SHUVALOV,

VA.

PRIMARY LIGHT-ENERGY CONVERSION IN TETRAMERIC CHLOROPHYLL  
STRUCTURE OF PHOTOSYSTEM II AND BACTERIAL REACTION CENTERS: II.  
FEMTO-AND PICOSECOND CHARGE SEPARATION IN PSII D1/D2/CYT B559  
COMPLEX

PHOTOSYNTHESIS RESEARCH 98(1-3), 95-103 (2008)

47. SMITIENKO, OA; SHELAEV, IV; GOSTEV, FE; FEL'DMAN, TB;  
NADTOCHENKO, VA; SARKISOV, OM; OSTROVSKY, MA.  
COHERENT PROCESSES IN FORMATION OF PRIMARY PRODUCTS OF  
RHODOPSIN PHOTOLYSIS  
DOKLADY BIOCHEMISTRY AND BIOPHYSICS 421(1), 194-198 (2008)
48. AIBOUSHEV, AV; ASTAFIEV, AA; LOZOVIK, YE; MERKULOVA, SP;  
NADTOCHENKO, VA; SARKISOV, OM.  
ENHANCED LUMINESCENCE OF SILVER NANOCLUSTERS IN MESOPOROUS  
FILM  
PHYSICS LETTERS A 372(31), 5193-5197 (2008)
49. ZOLOTAVIN, P; PERMENOVA, E; SARKISOV, O; NADTOCHENKO, V;  
AZOUANI, R; PORTES, P; CHHOR, K; KANAEV, A.  
TWO-PHOTON LUMINESCENCE ENHANCEMENT OF SILVER NANOCLUSTERS  
PHOTODEPOSITED ONTO MESOPOROUS TIO<sub>2</sub> FILM  
CHEMICAL PHYSICS LETTERS 457(4-6), 342-346 (2008)
50. SARKISOV, OM.  
FEMTOSECOND-TECHNOLOGY-BASED CHEMICAL RESEARCH  
RUSSIAN CHEMICAL BULLETIN 57(4), 736-753 (2008)
51. NADTOCHENKO, VA; SARKISOV, OM; NIKANDROV, VV; CHUBUKOV, PA;  
DENISOV, NN.  
INACTIVATION OF PATHOGENIC MICROORGANISMS IN THE  
PHOTOCATALYTIC PROCESS ON NANOSIZED TIO<sub>2</sub> CRYSTALS  
RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY B 2(1), 105-114 (2008)
52. SMITIENKO, O. A.; SHELAEV, I. V.; GOSTEV, F. E.; FEL'DMAN, T. B.;  
NADTOCHENKO, V. A.; SARKISOV, O. M.; OSTROVSKII, M. A..  
COHERENT PROCESSES IN THE COURSE OF VISUAL PIGMENT RHODOPSIN  
PRIMARY PHOTOPRODUCTS FORMATION  
DOKLADY AKADEMII NAUK 421(2), 277 (2008)
53. ZOLOTAVIN, P.N.; PETRUKHIN, A.N.; PERMENOVA, E.P.; SARKISOV, O.M.;  
NADTOCHENKO, V.A..  
THE FORMATION OF "HOT SPOTS" IN MESOPOROUS TIO<sub>2</sub> FILMS BY  
PHOTODEPOSITED SILVER NANOPARTICLES FOR USE IN NONLINEAR  
OPTICAL SPECTROSCOPY OF ISOLATED MOLECULES  
NANOTECHNOLOGIES IN RUSSIA 3(1-2), 122 (2008)
54. LUKASHEV, EP; NADTOCHENKO, VA; PERMENOVA, EP; SARKISOV, OM;  
RUBIN, AB.  
ELECTRON PHOTOTRANSFER BETWEEN PHOTOSYNTHETIC REACTION  
CENTERS OF THE BACTERIA RHODOBACTER SPAEROIDES AND  
SEMICONDUCTOR MESOPOROUS TIO<sub>2</sub> FILMS  
DOKLADY BIOCHEMISTRY AND BIOPHYSICS 415(1), 211-216 (2007)
55. SEMENOV, A; SHELAEV, I; GOSTEV, F; NADTOCHENKO, V; MAMEDOV, M;  
GOPTA, O; SHUVALOV, V; SARKISOV, O.  
PRIMARY EVENTS IN CYANOBACTERIAL PHOTOSYSTEM I COMPLEXES  
STUDIED USING FEMTOSECOND SELECTIVE EXCITATION OF ANTENNA AND  
REACTION CENTER CHLOROPHYLLS  
PHOTOSYNTHESIS RESEARCH 91(2-3), 154-154 (2007)
56. DOBRETSOV, GE; GULATYAN, SV; SARKISOV, OM; GOSTEV, FE;  
PETRUKHIN, AN; TITOV, AA; SVETLICHNY, VV; SYREISHCHIKOVA, TI.  
KINETICS OF REARRANGEMENT OF SOLVATION SHEATH OF AN EXCITED

MOLECULE OF THE FLUORESCENT PROBE 4 "-DIMETHYLAMINOCHALCONE  
BIOFIZIKA 52(1), 14-19 (2007)

57. LUKASHEV, E. P.; NADTOCHENKO, V. A.; PERMENOVA, E. P.; SARKISOV, O. M.; RUBIN, A. B..  
PHOTOINDUCED ELECTRON TRANSFER BETWEEN THE PHOTOSYNTHETIC REACTION CENTERS OF BACTERIA RHODOBACTER SPHAEROIDES AND TIO2 MESOPOROUS SEMICONDUCTOR FILMS  
DOKLADY AKADEMII NAUK 415(5), 696 (2007)
58. DOBRETSOV, G.E.; GULARYAN, S.K.; SARKISOV, O.M.; GOSTEV, F.E.; PETRUKHIN, A.N.; TITOV, A.A.; SVETLICHNY, V.YU.; SYREJSHCHIKOVA, T.I..  
KINETICS OF THE REARRANGEMENT OF THE SOLVATION SHELL OF AN EXCITED FLUORESCENT PROBE 4"-DIMETHYLAMINOCHALCONE  
BIOPHYSICS 52(1), 8 (2007)
59. AIBOUSHEV, A; LOZOVIK, YE; NADTOCHENKO, V; SARKISOV, OM.  
LOCAL FIELD ENHANCEMENT FOR SILVER AND PALLADIUM CLUSTERS PHOTODEPOSITED ON TIO2 NANOCRYSTALS  
ICONO 2007: NONLINEAR LASER SPECTROSCOPY AND HIGH-PRECISION MEASUREMENTS; AND FUNDAMENTALS OF LASER CHEMISTRY AND BIOPHOTONICS 6727, - (2007)
60. GULARYAN, SK; PETRUKHIN, AN; ZOLOTAVIN, PN; SVETLICHNY, VY; DOBRETSOV, GE; SARKISOV, OM.  
FLUORESCENT PROBE 4 "-DIMETHYLAMINOCHALCONE AS A DETECTOR OF STRUCTURAL DIFFERENCES OF CELLULAR ORGANELLS IN SITU  
BIOLOGICHESKIE MEMBRANY 23(6), 503-509 (2006)
61. NADTOCHENKO, V; DENISOV, N; SARKISOV, O; GUMY, D; PULGARIN, C; KIWI, J.  
LASER KINETIC SPECTROSCOPY OF THE INTERFACIAL CHARGE TRANSFER BETWEEN MEMBRANE CELL WALLS OF E-COLI AND TIO2  
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY 181(2-3), 401-407 (2006)
62. SARKISOV, OM; GOSTEV, FE; SHELAEV, IV; NOVODEREZHIN, VI; GOPTA, OA; MAMEDOV, MD; SEMENOV, AY; NADTOCHENKO, VA.  
LONG-LIVED COHERENT OSCILLATIONS OF THE FEMTOSECOND TRANSIENTS IN CYANOBACTERIAL PHOTOSYSTEM I  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 8(48), 5671-5678 (2006)
63. NEKIPELOVA, TD; GOSTEV, FE; KUZMIN, VA; SARKISOV, OM.  
ULTRAFAST EXCITED STATE PROTON TRANSFER DYNAMICS OF 1,2-DIHYDROQUINOLINES IN METHANOL SOLUTION  
PHOTOCHEMICAL & PHOTOBIOLOGICAL SCIENCES 5(9), 815-821 (2006)
64. GOROKHOV, V V; PASHCHENKO, V Z; SARKISOV, O M; RUBIN, A B.  
SPECTRAL AND TEMPORAL DYNAMICS OF TRANSITIONAL PROCESSES IN THE REACTION CENTERS OF RHODOBACTER SPHAEROIDES IN THE REGION OF 780-830 NM.  
DOKLADY. BIOCHEMISTRY AND BIOPHYSICS 406, - (2006)
65. GOROKHOV, V. V.; PASHCHENKO, V. Z.; SARKISOV, O. M.; RUBIN, A. B..  
SPECTRAL-TEMPORARY DYNAMICS OF TRANSIENT PROCESSES IN RC OF RHODOBACTER SPHAEROIDES AT 780-830 NM  
DOKLADY RAN 406(6), 825 (2006)
66. GULARYAN, S.K.; PETRUKHIN, A.N.; ZOLOTAVIN, P.N.; SVETLICHNYI, V.Y.; DOBRETSOV, G.E.; SARKISOV, O.M..  
FLUORESENTNY ZOND 4-DIMETHYLAMINOCHALCON KAK DETECTOR STRUKTURNYKH RAZLICHIIH SUBKLETOCHNYKH ORGANELL IN SITU (FLUORESCENT PROBE 4-DIMETHYLAMINOCHALCONE AS A DETECTOR OF STRUCTURAL DIFFERENCES OF CELLULAR ORGANELLES IN SITU)  
BIOL. MEMBR. 23, 514 (2006)

67. **GULARYAN, SK; DOBRETSOV, GE; SARKISOV, OM; GOSTEV, FE; SVETLICHNYI, VY.**  
THE LIPOPHILIC FLUORESCENT PROBE 4-DIMETHYLAMINOCHALCONE:  
FACTORS RESPONSIBLE FOR THE FLUORESCENCE YIELD  
BIOFIZIKA 50(5), 780-786 (2005)
68. **KRIVOGUZ, MN; SARKISOV, OM; UMANSKY, SY.**  
EFFECT OF THE PHASE MODULATION OF A LIGHT PULSE ON THREE-PHOTON  
ABSORPTION IN A SYSTEM WITHOUT INTERMEDIATE RESONANCE STATES  
QUANTUM ELECTRONICS 35(7), 653-657 (2005)
69. **ZUBOVA, NN; KOROLENKO, VA; ASTAFYEV, AA; PETRUKHIN, AN;**  
**VINOKUROV, LM; SARKISOV, OM; SAVITSKY, AP.**  
BRIGHTNESS OF YELLOW FLUORESCENT PROTEIN FROM CORAL (ZFP538)  
DEPENDS ON AGGREGATION  
BIOCHEMISTRY 44(10), 3982-3993 (2005)
70. **NADTOCHENKO, VA; LOBACH, AS; GOSTEV, FE; SARKISOV, OM;**  
**SHCHERBININ, DO; KOVALENKO, SA; ERNSTING, NP.**  
FEMTOSECOND DYNAMICS OF EXCITATIONS AND ELECTRON-ELECTRON  
INTERACTIONS IN SINGLE-WALL CARBON NANOTUBES  
DOKLADY PHYSICS 50(1), 12-17 (2005)
71. **ANANJEVSKY, MS; VETCHINKIN, AS; SARKISOV, OM; UMANSKII, SY;**  
**FRADKOV, AL; ZOTOV, YA.**  
QUANTUM CONTROL OF DISSOCIATION OF AN IODINE MOLECULE BY ONE  
AND TWO FEMTOSECOND LASER PULSES EXCITATION  
2005 INTERNATIONAL CONFERENCE ON PHYSICS AND CONTROL (PHYSCON) ,  
636-641 (2005)
72. **NADTOCHENKO, VA; LOBACH, AS; GOSTEV, FE; TCHERBININ, DO;**  
**SOBENNIKOV, A; SARKISOV, OM.**  
FEMTOSECOND TRANSIENT ABSORPTION SPECTRA AND RELAXATION  
DYNAMICS OF SWNT IN SDS MICELLAR SOLUTIONS  
ELECTRONIC PROPERTIES OF NOVEL NANOSTRUCTURES 786, 146-149 (2005)
73. **PETRUKHIN, A N; ASTAF'EV, A A; ZOLOTAVIN, P N; FEL'DMAN, T B;**  
**DONTSOV, A E; SARKISOV, O M; OSTROVSKY, M A.**  
HETEROGENEITY OF STRUCTURE AND FLUORESCENCE OF SINGLE  
LIPOFUSCIN GRANULE FROM RETINAL PIGMENT EPITHELIUM OF HUMAN  
DONOR EYES: STUDY WITH THE USE OF ATOMIC FORCE MICROSCOPY AND  
NEAR-FIELD MICROSCOPY.  
DOKLADY. BIOCHEMISTRY AND BIOPHYSICS 405, - (2005)
74. **ZUBOVA, NN; ASTAFYEV, AA; PETRUKHIN, AN; SARKISOV, OM; SAVITSKY, AP.**  
ATOMIC FORCE AND NEAR-FIELD SCANNING MICROSCOPY OF SOLID ZFP538  
FILMS  
GENETICALLY ENGINEERED AND OPTICAL PROBES FOR BIOMEDICAL  
APPLICATIONS III 5704, 200-205 (2005)
75. **GULARYAN, SK; SARKISOV, OM; DOBRETSOV, GE; SVETLICHNYI, VY;**  
**GOSTEV, FE; ANTIPIN, SA.**  
4-DIMETHYLAMINOCHALCONE AS FLUORESCENT PROBE: EFFECT OF THE  
MEDIUM POLARITY ON RELAXATION PROCESSES IN THE EXCITED STATE  
RUSSIAN CHEMICAL BULLETIN 53(8), 1670-1673 (2004)
76. **USHAKOV, EN; NADTOCHENKO, VA; GROMOV, SP; VEDERNIKOV, AI;**  
**LOBOVA, NA; ALFIMOV, MV; GOSTEV, FE; PETRUKHIN, AN; SARKISOV,**  
**OM.**  
ULTRAFAST EXCITED STATE DYNAMICS OF THE BI- AND TERMOLECULAR  
STILBENE-VILOGEN CHARGE-TRANSFER COMPLEXES ASSEMBLED VIA  
HOST-GUEST INTERACTIONS  
CHEMICAL PHYSICS 298(1-3), 251-261 (2004)

77. NADTOCHENKO, VA; LOBACH, AS; GOSTEV, FE; SARKISOV, OM;  
SHCHERBININ, DO; OBRAZTSOVA, ED.  
DYNAMICS AND SPECTRA OF EXCITED STATES OF WATER-MICELLAR  
SUSPENSIONS OF SINGLE-WALLED CARBON NANOTUBES  
JETP LETTERS 80(3), 176-180 (2004)
78. ANTIPIN, S A; FEL'DMAN, T B; GOSTEV, F E; SMITIENKO, O A; SARKISOV, O  
M; OSTROVSKY, M A.  
FEMTOSECOND DYNAMICS OF INTRAMOLECULAR ENERGY TRANSITION IN  
VISUAL PIGMENT RHODOPSIN.  
DOKLADY. BIOCHEMISTRY AND BIOPHYSICS 396, - (2004)
79. PASCHENKO, V Z; GOROKHOV, V V; KORVATOVSKII, B N; GRISHANOVA, N  
P; SARKISOV, O M; RENGER, G; RUBIN, A B.  
FEMTOSECOND DYNAMICS OF TRANSITION PROCESSES IN REACTION  
CENTERS OF RHODOBACTER SPHAEROIDES.  
DOKLADY. BIOCHEMISTRY AND BIOPHYSICS 399, - (2004)
80. GOSTEV, FE; KOL'TSOVA, LS; PETRUKHIN, AN; TITOVS, AA; SHIYONOK, AI;  
ZAICHENKO, NL; MAREVTSEV, VS; SARKISOV, OM.  
SPECTRAL LUMINESCENT PROPERTIES AND DYNAMICS OF  
INTRAMOLECULAR PROCESSES IN 2,4,5-TRIARYLIMIDAZOLES  
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY 156(1-3),  
15-22 (2003)
81. GOSTEV, FE; PETRUKHIN, AN; TITOVS, AA; SHIENOK, AI; MAREVTSEV, VS;  
SARKISOV, OM.  
DYNAMICS OF INTRAMOLECULAR PROCESSES IN ELECTRONIC-EXCITED  
STATES OF 2,4,5-TRIARYLIMIDAZOLE MOLECULES  
RUSSIAN CHEMICAL BULLETIN 52(3), 557-561 (2003)
82. KIWI, J; DENISOV, N; GAK, Y; OVANESYAN, N; BUFFAT, PA; SUVOROVA, E;  
GOSTEV, F; TITOVS, A; SARKISOV, O; ALBERS, P; NADTOCHENKO, V.  
CATALYTIC Fe<sup>3+</sup> CLUSTERS AND COMPLEXES IN NAFION ACTIVE IN PHOTO-  
FENTON PROCESSES. HIGH-RESOLUTION ELECTRON MICROSCOPY AND  
FEMTOSECOND STUDIES  
LANGMUIR 18(23), 9054-9066 (2002)
83. NADTOCHENKO, VA; KHUDJAKOV, DV; ABRAMOVA, NV; VORONTSOV, EV;  
LOIM, NM; GOSTEV, FE; TOVBIN, DG; TITOVS, AA; SARKISOV, OM.  
FEMTOSECOND DYNAMICS OF RELAXATION OF PHOTOEXCITED MESO-  
TETRAFERROCENYL PORPHYRIN IN THE NONPROTONATED AND  
DIPROTONATED FORMS (FC(4)PH(2) AND FC(4)PH(4)(2+))  
RUSSIAN CHEMICAL BULLETIN 51(6), 986-993 (2002)
84. NADTOCHENKO, VA; DENISOV, NN; GAK, VY; GOSTEV, FE; TITOVS, AA;  
SARKISOV, OM; NIKANDROV, VV.  
FEMTOSECOND RELAXATION OF PHOTOEXCITED STATES IN NANOSIZED  
SEMICONDUCTOR PARTICLES OF IRON OXIDES  
RUSSIAN CHEMICAL BULLETIN 51(3), 457-461 (2002)
85. DZHEMESYUK, O A; ANTIPIN, S A; GOSTEV, F E; FEDOROVICH, I B;  
SARKISOV, O M; OSTROVSKII, M A.  
ENERGY TRANSFER FROM TRYPTOPHANE AMINO ACID RESIDUES TO  
RETINAL IN A BACTERIORHODOPSIN MOLECULE WITHIN A FEMTOSECOND  
TIMESCALE.  
DOKLADY. BIOCHEMISTRY AND BIOPHYSICS 382, - (2002)
86. SARKISOV, OM; PETRUKHIN, AN; GOSTEV, FE; TITOVS, AA.  
CONTROL OF ELEMENTARY CHEMICAL REACTIONS BY FEMTOSECOND LIGHT  
PULSES  
QUANTUM ELECTRONICS 31(6), 483-488 (2001)
87. SARKISOV, OM; UMANSKII, SY.  
FEMTOCHEMISTRY  
USPEKHI KHMII 70(6), 515-538 (2001)

88. **ANTIPIN, SA; PETRUKHIN, AN; GOSTEV, FE; MAREVTSEV, VS; TITOV, AA; BARACHEVSKY, VA; STROKACH, YP; SARKISOV, OM.**  
FEMTOSECOND TRANSIENT ABSORPTION SPECTROSCOPY OF NON-SUBSTITUTED PHOTOCHROMIC SPIROCOMPOUNDS  
CHEMICAL PHYSICS LETTERS 331(5-6), 378-386 (2000)
89. **NADTOCHENKO, VA; SARKISOV, OM; LOIM, NM.**  
FEMTOSECOND DYNAMICS OF INTRAMOLECULAR ELECTRON TRANSFER IN PHOTOEXCITED MESO-TETRAFERROCENYLPORPHYRINS.  
ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY 220, U223-U223 (2000)
90. **ANTIPIN, SA; PETRUKHIN, AN; GOSTEV, FE; MAREVTSEV, VS; SARKISOV, OM.**  
FEMTOCHEMISTRY OF PHOTOCHROMIC SPIROCOMPOUNDS.  
ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY 220, U221-U221 (2000)
91. **MALAKHOV, DV; GOSTEV, FE; KOROTEEV, NI; LOZOVOI, VV; MAGNITSKII, SA; SARKISOV, OM; TOVBIN, DG; TITOV, AA.**  
PRIMARY PHOTOISOMERIZATION REACTIONS OF 6-PHENOXY-5,12-NAPHTACENEQUINONE  
CHEMICAL PHYSICS REPORTS 18(7), 1217-1232 (2000)
92. **LOZOVOI, VV; GOSTEV, FE; TITOV, AA; TOVBIN, DG; ANTIPIN, SA; UMANSKII, SY; SARKISOV, OM.**  
FEMTOSECOND POLARIZATION SPECTROSCOPY OF COHERENT ROTATIONAL WAVE PACKETS OF D-2, N-2, AND NO<sub>2</sub>  
CHEMICAL PHYSICS REPORTS 18(7), 1197-1216 (2000)
93. **LOZOVOY, VV; SARKISOV, OM; VETCHINKIN, AS; UMANSKII, SY.**  
COHERENT CONTROL OF THE MOLECULAR IODINE VIBRATIONAL DYNAMICS BY CHIRPED FEMTOSECOND LIGHT PULSES: THEORETICAL SIMULATION OF THE PUMP-PROBE EXPERIMENT  
CHEMICAL PHYSICS 243(1-2), 97-114 (1999)
94. **SARKISOV, OM; TOVBIN, DG; LOZOVOY, VV; GOSTEV, FE; TITOV, AA; ANTIPIN, SA; UMANSKIY, SY.**  
FEMTOSECOND RAMAN-INDUCED POLARISATION SPECTROSCOPY OF COHERENT ROTATIONAL WAVE PACKETS: D-2, N-2 AND NO<sub>2</sub>  
CHEMICAL PHYSICS LETTERS 303(5-6), 458-466 (1999)
95. **LOZOVOY, VV; ANTIPIN, SA; GOSTEV, FE; TITOV, AA; TOVBIN, DG; SARKISOV, OM; VETCHINKIN, AS; UMANSKII, SY.**  
EXPERIMENTAL DEMONSTRATION OF THE COHERENT CONTROL OF THE MOLECULAR IODINE VIBRATIONAL DYNAMICS BY CHIRPED FEMTOSECOND LIGHT PULSES  
CHEMICAL PHYSICS LETTERS 284(3-4), 221-229 (1998)
96. **VETCHINKIN, AS; LOZOVOI, VV; SARKISOV, OM; UMANSKII, SY.**  
HOW THE SIGNAL SHAPE IN CLASSICAL FEMTOSECOND "PUMPING-PROBING" EXPERIMENTS DEPENDS ON THE STRUCTURE OF LASER RADIATION PULSES  
CHEMICAL PHYSICS REPORTS 17(6), 1031-1041 (1998)
97. **LOZOVOI, VV; TITOV, AA; GOSTEV, FE; TOVBIN, DG; ANTIPIN, SA; UMANSKII, SY; SARKISOV, OM.**  
DYNAMICS OF VIBRATIONAL WAVEPACKETS EXCITED BY A PHASE-MODULATED FEMTOSECOND LIGHT PULSE IN I-2  
CHEMICAL PHYSICS REPORTS 17(7), 1267-1274 (1998)
98. **LOZOVSKY, VA; SARKISOV, OM; OKHRIMCHUK, AG; ENIS, AL.**  
UPPER LIMIT OF THE RATE CONSTANT FOR THE REACTION OF NH<sub>2</sub> RADICALS WITH O-2 MEASURED BY INTRACAVITY DYE LASER SPECTROSCOPY  
CHEMICAL PHYSICS REPORTS 16(3), 395-417 (1997)
99. **GOSTEV, FE; KACHANOV, AA; KOVALENKO, SA; LOZOVOI, VV; PANOV, SI; SARKISOV, OM; SVIRIDENKOV, EA; TITOV, AA; TOVBIN, DG.**

SETUP FOR INVESTIGATING THE DYNAMICS OF INTRAMOLECULAR MOTIONS  
WITH FEMTOSECOND RESOLUTION

INSTRUMENTS AND EXPERIMENTAL TECHNIQUES 39(4), 567-575 (1996)

100. **SARKISOV, OM; GOSTEV, FE; LOZOVOY, VV; SVIRIDENKOV, EA; TITOV, AA; TOVBIN, DG; UMANSKY, SY.**

FEMTOSECOND VIBRATIONAL NUCLEAR DYNAMICS IN THE  
ELECTRONICALLY EXCITED STATE OF THE I-2 MOLECULE  
RUSSIAN CHEMICAL BULLETIN 45(3), 553-559 (1996)

101. **LOZOVOI, VV; SARKISOV, OM; UMANSKII, SY.**

NUMERICAL MODELING OF PUMPING-PROBING CLASSIC PHEMTOSECOND  
EXPERIMENT

KHIMICHESKAYA FIZIKA 14(8), 83-95 (1995)

102. **SARKISOV, OM; LOZOVSKII, VA.**

KINETIC INTERRESONATOR LASER SPECTROSCOPY OF NITROGENOUS  
RADICALS

KHIMICHESKAYA FIZIKA 14(9), 132-150 (1995)

103. **IOGANSEN, AA; SARKISOV, OM; ZIMONT, EV; SEETULA, JA; TIMONEN, RS; CHESKIS, S.**

FORMATION OF VIBRATIONALLY EXCITED OH RADICALS IN THE O((1)D)+H<sub>2</sub>S  
REACTION

CHEMICAL PHYSICS LETTERS 212(6), 604-610 (1993)

104. **BRYUKOV, MG; KACHANOV, AA; TIMONNEN, R; SEETULA, J; VANDOREN, J; SARKISOV, OM.**

KINETICS OF HNO REACTIONS WITH O<sub>2</sub> AND HNO

CHEMICAL PHYSICS LETTERS 208(5-6), 392-398 (1993)

105. **MARGOLIN, AD; SHMELEV, VM; MOKHIN, GN; DVORKOVICH, AV; KRUPKIN, VG; SARKISOV, OM; KHABAROV, VN; DZEGILENKO, FM.**

EFFECT OF HYDROGEN WASTES ON ATMOSPHERIC OZONE

KHIMICHESKAYA FIZIKA 12(8), 1054-1057 (1993)

106. **BRYUKOV, MG; KACHANOV, AA; PANOV, SI; BALAKHNIN, VP; VANDOOREN, D; SARKISOV, OM.**

STUDY OF HNO REACTIONS WITH OXYGEN THROUGH THE INTERRESONATOR  
LASER SPECTROSCOPY TECHNIQUE

KHIMICHESKAYA FIZIKA 11(1), 43-49 (1992)

107. **DUBINSKII, IA; LOZOVSKII, VA; SARKISOV, OM; KHABAROV, VN; BULATOV, VP; BULOYAN, AA.**

PHOTOCHEMICAL CONVERSION OF AMMONIUM IN THE PRESENCE OF OZONE  
KHIMICHESKAYA FIZIKA 11(1), 50-53 (1992)

108. **BRYUKOV, MG; KACHANOV, AA; PANOV, SI; SARKISOV, OM.**

INTRACAVITY LASER SPECTROSCOPY OF ELEMENTARY PROCESSES BASED  
ON A CW RING DYE-LASER

JOURNAL DE PHYSIQUE IV 1(C7), 485-488 (1991)

109. **VANDOOREN, J; SARKISOV, OM; BALAKHNIN, VP; VANTIGGELEN, PJ.**  
DISCUSSION ON THE FORMATION AND REMOVAL OF NOX IN AMMONIA  
FLAMES

CHEMICAL PHYSICS LETTERS 184(4), 294-300 (1991)

110. **SARKISOV, OM.**

TRANSFORMATION OF NITROGENOUS AND SULFUR-CONTAINING-  
COMPOUNDS IN ATMOSPHERE AND METHODS OF THE REDUCTION OF  
INDUSTRIAL-WASTES OF NITROGEN AND SULFUR-OXIDES

USPEKHI KHIMII 60(3), 521-529 (1991)

111. **BULATOV, VP; MATYAGIN, YV; SARKISOV, OM; SVIRIDENKOV, EA.**

STUDY OF THE REACTION OF QUADRATIC DESTRUCTION OF HO<sub>2</sub> RADICALS  
KHIMICHESKAYA FIZIKA 10(9), 1224-1230 (1991)

112. **BULATOV, VP; MATYAGIN, YV; SARKISOV, OM; SVIRIDENKOV, EA.**

ABSORPTION-SPECTRA OF HO<sub>2</sub> AND CH<sub>3</sub>O<sub>2</sub> RADICALS IN 1.20-1.27 MU-M

DOMAIN

KHIMICHESKAYA FIZIKA 10(3), 311-316 (1991)

113. BULATOV, VP; VERESHCHUK, SI; DZEGILENKO, FN; SARKISOV, OM; KHABAROV, VN.

PHOTOOXIDATIVE CONVERSION OF H<sub>2</sub>S IN THE PRESENCE OF O<sub>2</sub> AND NO<sub>2</sub>

KHIMICHESKAYA FIZIKA 9(9), 1214-1223 (1990)

114. BULATOV, VP; IOFFE, AA; LOZOVSKEE, VA; SARKISOV, OM.

MECHANISM OF NH<sub>2</sub> RADICAL REACTION WITH NO AT 295-620-K

KHIMICHESKAYA FIZIKA 9(10), 1368-1374 (1990)

115. BULATOV, VP; IOFFE, AA; LOZOVSKEE, VA; SARKISOV, OM; BULOVAN, AA.

CONSTANTS OF NH<sub>2</sub>+ NO<sub>2</sub> REACTION-RATE IN 295-620-K TEMPERATURE-RANGE

KHIMICHESKAYA FIZIKA 9(3), 370-374 (1990)

116. BULATOV, VP; IOFFE, AA; LOZOVSKEE, VA; SARKISOV, OM.

ON THE REACTION OF THE NH<sub>2</sub> RADICAL WITH NO AT 295-620-K

CHEMICAL PHYSICS LETTERS 161(2), 141-146 (1989)

117. BULATOV, VP; IOFFE, AA; LOZOVSKEE, VA; SARKISOV, OM.

ON THE REACTION OF THE NH<sub>2</sub> RADICAL WITH NO<sub>2</sub> AT 295-620-K

CHEMICAL PHYSICS LETTERS 159(2-3), 171-174 (1989)

118. IOFFE, AA; BULATOV, VP; LOZOVSKEE, VA; GOLDENBERG, MY; SARKISOV, OM; UMANSKY, SY.

ON THE REACTION OF THE NH<sub>2</sub> RADICAL WITH SO<sub>2</sub> AT 298-363-K

CHEMICAL PHYSICS LETTERS 156(5), 425-432 (1989)

119. CHESKIS, SG; IOGANSEN, AA; KULAKOV, PV; RAZUVAEV, IY; SARKISOV, OM; TITOV, AA.

OH VIBRATIONAL DISTRIBUTION IN THE REACTION O(D-1)+CH<sub>4</sub>

CHEMICAL PHYSICS LETTERS 155(1), 37-42 (1989)

120. BULATOV, VP; CHESKIS, SG; IOGANSEN, AA; KULAKOV, PV; SARKISOV, OM; HASSINEN, E.

REACTION OF OH RADICALS WITH CS<sub>2</sub>

CHEMICAL PHYSICS LETTERS 153(2-3), 258-262 (1988)

121. CHESKIS, SG; IOGANSEN, AA; KULAKOV, PV; SARKISOV, OM; TITOV, AA.

LASER PHOTOLYSIS OF OZONE IN THE PRESENCE OF AMMONIA -

VIBRATIONALLY EXCITED OH RADICALS

CHEMICAL PHYSICS LETTERS 143(4), 348-352 (1988)

122. CHESKIS, SG; IOGANSEN, AA; KULAKOV, PV; RAZUVAEV, IY; SARKISOV, OM; TITOV, AA.

ON VIBRATIONAL-ENERGY DISTRIBUTION IN REACTIONS OF O(1D) ATOMS

FINNISH CHEMICAL LETTERS 15(3-4), 77-78 (1988)

123. SARKISOV, OM.

ELEMENTARY REACTIONS OF SMALL RADICALS

FINNISH CHEMICAL LETTERS 15(3-4), 75-76 (1988)

124. BULATOV, VP; PEROIKOVA, AI; SARKISOV, OM; KHABAROV, VN.

STUDY OF THE REACTION OF COS+OH-JSH+CO<sub>2</sub> BY THE INTRARESONATOR LASER SPECTROSCOPY TECHNIQUE

KHIMICHESKAYA FIZIKA 6(10), 1408-1412 (1987)

125. IOGANSEN, AA; KULAKOV, PV; SARKISOV, OM; TITOV, AA; CHESKIS, SG.

DISTRIBUTION OF ENERGY RELEASED IN THE REACTION O(D-1)+NH<sub>3</sub>-

JNH<sub>2</sub>+OH IN RELATION TO THE DEGREES OF VIBRATORY FREEDOM OF THE PRODUCTS

KHIMICHESKAYA FIZIKA 6(4), 426-432 (1987)

126. BALAKHNIN, VP; KOSTIKOV, SM; SARKISOV, OM; CHESKIS, SG.

LASER PHOTOCHEMISTRY OF NO<sub>2</sub>

HIGH ENERGY CHEMISTRY 21(2), 149-153 (1987)

127. **BULATOV, VP; SARKISOV, OM; KOZLINER, MZ; EGOROV, VI.**  
MECHANISM OF HYDROGEN-SULFIDE PHOTOOXIDATION IN ATMOSPHERE  
Khimicheskaya Fizika 5(8), 1031-1036 (1986)
128. **IOGANSEN, AA; PESTUNOV, VY; SARKISOV, OM; TITOV, AA; CHESKIS, SG.**  
PULSIVE OZONE PHOTOLYSIS IN THE PRESENCE OF AMMONIUM -  
INVESTIGATION OF O(D-1)+NH<sub>3</sub> AND NH<sub>2</sub>(V)+O<sub>3</sub> REACTIONS  
Khimicheskaya Fizika 5(2), 190-195 (1986)
129. **BULATOV, VP; KOZLINER, MZ; SARKISOV, OM.**  
REACTIONS OF SH AND HSO RADICALS WITH NITROGEN-OXIDE  
Khimicheskaya Fizika 4(10), 1353-1357 (1985)
130. **CHESKIS, SG; IOGANSEN, AA; SARKISOV, OM; TITOV, AA.**  
LASER PHOTOLYSIS OF OZONE IN THE PRESENCE OF AMMONIA - FORMATION  
AND DECAY OF VIBRATIONALLY EXCITED NH<sub>2</sub> RADICALS  
Chemical Physics Letters 120(1), 45-49 (1985)
131. **IOGANSEN, AA; SARKISOV, OM; CHESKIS, SG.**  
AN INVESTIGATION ON THE KINETICS OF FORMATION AND CONSUMPTION  
OF NH<sub>2</sub> RADICALS IN PULSED LASER PHOTOLYSIS OF AN NH<sub>3</sub>/O<sub>3</sub> MIXTURE  
EMPLOYING LASER-INDUCED FLUORESCENCE  
Khimicheskaya Fizika 4(3), 372-376 (1985)
132. **SARKISOV, OM; CHESKIS, SG.**  
NEW SPECTROSCOPIC METHODS IN THE GAS-PHASE CHEMICAL-KINETICS  
Uspekhi Khimii 54(3), 396-417 (1985)
133. **LOZOVS'KII, VA; IOFFE, MA; SARKISOV, OM.**  
RADICAL NH<sub>2</sub> REACTION WITH OXYGEN  
Khimicheskaya Fizika 4(7), 931-935 (1985)
134. **BULATOV, VP; KOZLINER, MZ; SARKISOV, OM.**  
DETERMINATION OF RATE CONSTANTS FOR THE REACTIONS SH+NO<sub>2</sub>-  
HSO+NO AND HSO+NO<sub>2</sub> PRODUCTS  
Khimicheskaya Fizika 3(9), 1300-1305 (1984)
135. **BULATOV, VP; IOFFE, MA; KOZLINER, MZ; SARKISOV, OM.**  
FORMATION OF HSO RADICALS DURING IMPULSE PHOTOLYSIS OF H<sub>2</sub>S  
MIXTURES WITH NO<sub>2</sub> AND O<sub>2</sub>  
Khimicheskaya Fizika 3(7), 988-992 (1984)
136. **KOSTIKOV, SM; BALAKHNIN, VP; BULATOV, VP; SARKISOV, OM.**  
STUDY OF THE REACTIONS BETWEEN NO<sub>2</sub> MOLECULES EXCITED WITH  
ARGON-LASER RADIATION AND NO<sub>2</sub> AND C<sub>2</sub>F<sub>4</sub>  
Khimicheskaya Fizika 3(2), 234-240 (1984)
137. **LOZOVS'KY, VA; IOFFE, MA; SARKISOV, OM.**  
ON THE REACTION OF THE NH<sub>2</sub> RADICAL WITH OXYGEN  
Chemical Physics Letters 110(6), 651-654 (1984)
138. **RYABCHUK, SV; SARKISOV, OM; CHESKIS, SG.**  
STUDY OF H+HMO-JH<sub>2</sub>+NO REACTIONS BY THE INTRA-RESONANT  
SPECTROSCOPY METHOD  
Khimicheskaya Fizika 3(5), 684-687 (1984)
139. **ZAKHARIN, VI; NADTOCHENKO, VA; SARKISOV, OM; TEITELBOIM, MA.**  
STUDY OF THE PH<sub>2</sub> RADICAL RECOMBINATION  
Doklady Akademii Nauk SSSR 263(1), 127-130 (1982)
140. **BULATOV, VP; ZAVOROTNYI, SI; OVCHINNIKOV, AA; SARKISOV, OM;  
SVIRIDENKOV, EA; TROSTIN, AI; CHESKIS, SG.**  
HIGH-SENSITIVE PULSE APPARATUS FOR INTRA-CAVITY LASER  
SPECTROSCOPY  
Kvantovaya Elektronika 9(2), 427-429 (1982)
141. **CHESKIS, SG; NADTOCHENKO, VA; SARKISOV, OM.**  
STUDY OF THE HNO + HNO AND HNO + NO REACTIONS BY INTRA-CAVITY  
LASER SPECTROSCOPY  
International Journal of Chemical Kinetics 13(10), 1041-1050 (1981)

- 142. ZAKHARIN, VI; NADTOCHENKO, VA; SARKISOV, OM.**  
DETECTION OF GAIN LINES UNDER MO(CO)<sub>6</sub> PHOTOLYSIS  
KVANTOVAYA ELEKTRONIKA 8(9), 2036-2039 (1981)
- 143. NADTOCHENKO, VA; SARKISOV, OM; FROLOV, MP; TSANAVA, RA;**  
**CHESKIS, SG.**  
STUDY OF THE RELAXATION OF THE VIBRATIONAL-ENERGY OF NH<sub>2</sub> AND  
HCO RADICALS BY INTRA-CAVITY LASER SPECTROSCOPY  
KINETICS AND CATALYSIS 22(4), 670-675 (1981)
- 144. CHERNYSHEVA, AV; BULATOV, VP; VEDENEV, VI; SARKISOV, OM.**  
FLUORINE-INITIATED LOW-TEMPERATURE OXIDATION OF  
DIFLUOROMETHANE  
KINETICS AND CATALYSIS 22(2), 208-212 (1981)
- 145. VEDENEV, VI; GERSHENZON, YM; POROIKOVA, AI; SARKISOV, OM;**  
**CHAIKIN, AM.**  
KINETICS OF THE COMBUSTION OF HYDROGEN ABOVE THE 1ST SELF-  
IGNITION LIMIT IN THE DIFFUSION REGION OF CHAIN TERMINATION  
KINETICS AND CATALYSIS 22(1), 71-76 (1981)
- 146. BULATOV, VP; BULOYAN, AA; CHESKIS, SG; KOZLINER, MZ; SARKISOV,**  
**OM; TROSTIN, AI.**  
ON THE REACTION OF THE NH<sub>2</sub> RADICAL WITH OZONE  
CHEMICAL PHYSICS LETTERS 74(2), 288-292 (1980)
- 147. VEDENEV, VI; PROPOI, VI; SARKISOV, OM.**  
THE FORMATION OF EXCITED MOLECULES OF TETRAFLUOROETHYLENE  
OXIDE IN THE REACTION OF CF<sub>3</sub>O<sub>2</sub> + C<sub>2</sub>F<sub>4</sub>  
KINETICS AND CATALYSIS 21(4), 612-615 (1980)