

**List of Publications**

1. Rabinovich E. M, **Smolyakov G. A.**, “Injection current modulation influence on the axial mode structure of active semiconductor waveguide”, *Laser Beams (In Russian)*, p.19, Khabarovsk (1988).
2. Rabinovich E. M., **Smolyakov G. A.**, “Electro-magnetic emission structure forming in 3-D resonator of planar stripe DH laser diode”, *Proceedings of the School "Electromagnetic Waves Interaction with Semiconductor and Dielectric Structures"*, (In Russian), part 1, p. 213, Saratov (1988).
3. Kolosov V. V., Rabinovich E. M, **Smolyakov G. A.**, “Experimental investigation of UHF modulation characteristics of stripe semiconductor lasers”, *Proceedings of the School "Electromagnetic Waves Interaction with Semiconductor and Dielectric Structures"*, (In Russian), part II, p. 52, Saratov (1988).
4. Rabinovich E. M, **Smolyakov G. A.**, Kolosov V. V., “Experimental investigation of UHF modulation characteristics of planar stripe heterolasers”, *Diagnostical Applications of Laser and Fiber Optics (In Russian)*, p. 27, Volgograd (1989).
5. Bogoroditskaya R. A., Rabinovich E. M, **Smolyakov G. A.**, “Space-modulation characteristics of DFB lasers ( $\lambda=1.57 \mu\text{m}$ .)”, *Summaries of the Papers Presented at the 1 All-Union Conference “Physical Problems of Optical Communication”*, (In Russian), p. 36, Sevastopol (1990).
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10. Smagley V. A., **Smolyakov G. A.**, Eliseev P. G., Osinski M., and Przekwas A. J., “Current self-distribution effect in vertical-cavity surface-emitting semiconductor lasers”, *Physics and Simulation of Optoelectronic Devices VI* (M. Osinski, P. Blood, and A. Ishibashi, Eds.), SPIE International Symposium on Integrated Devices and Applications Optoelectronics 98, San Jose, California, 26-30 January 1998, *Proc. SPIE* **3283**, pp. 171-182 (1998).
11. Osinski M., Smagley V. A., **Smolyakov G. A.**, Eliseev P. G., and Simonis G., “Electro-thermal modeling of oxide-confined vertical-cavity surface-emitting semiconductor lasers and large-size two-dimensional arrays”, Advanced Sensors Consortium, *Proceedings of the 2nd Annual FedLab Symposium*, College Park, Maryland, 2-6 February 1998, pp. 69-73 (1998).

12. M. Osinski, V. A. Smagley, **G. A. Smolyakov**, T. Svimonishvili, P. G. Eliseev, and G. Simonis, "Three-dimensional simulation of oxide-confined vertical-cavity surface-emitting semiconductor lasers", *Optoelectronic Materials and Devices* (M. Osinski and Y.-K. Su, Eds.), SPIE Photonics Taiwan '98 Symposium, Taipei, Taiwan, 9-11 July, 1998, *Proc. SPIE* **3419**, pp. 196-207 (1998).
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14. **G. A. Smolyakov**, V. A. Smagley, W. Nakwaski, P. G. Eliseev, and M. Osinski, "Design of InGaN/GaN/AlGaIn VCSELs using the effective frequency method", *Physics and Simulation of Optoelectronic Devices VII*, Optoelectronics'99 – SPIE International Symposium on Integrated devices and Applications, San Jose, California, 25-29 January 1999 (P. Blood, A. Ishibashi and M. Osinski, Eds.), *Proc. SPIE* **3625**, pp. 324-335 (1999).
15. M. Osinski, V. A. Smagley, T. Svimonishvili, and **G. A. Smolyakov**, "3D electro-thermal simulation of intracavity-contacted oxide-confined VCSELs operating at room temperature and at 77K", *Physics and Simulation of Optoelectronic Devices VII*, Optoelectronics'99 – SPIE International Symposium on Integrated devices and Applications, San Jose, California, 25-29 January 1999 (P. Blood, A. Ishibashi and M. Osinski, Eds.), *Proc. SPIE* **3625**, pp. 371-382 (1999).
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