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## Abstract

**Title:** *Feedback in random lasers*

Random lasers are simple, miniature, robust in operation, and inexpensive sources of stimulated emission without cavity. The feedback in random lasers is provided by scattering in a gain medium. The properties of random lasers strongly depend on the strength of scattering and corresponding confinement of the stimulated emission and pumping. The physics of random lasers is challenging and not completely understood yet. The proposed applications of random lasers range from information technology and identification to express testing of novel laser materials and laser fusion.

## Biography

**DR. NOGINOV** graduated from *MOSCOW INSTITUTE FOR PHYSICS AND TECHNOLOGY (Moscow, Russia)* with a Master of Science degree in Electronics Engineering in 1985. In 1990 he received a Ph.D. degree in Physical-Mathematical Sciences from *GENERAL PHYSICS INSTITUTE OF THE USSR ACADEMY OF SCIENCES (Moscow, Russia)*. The appointments of Dr. Noginov include: *GENERAL PHYSICS INSTITUTE OF THE USSR ACADEMY OF SCIENCES (Moscow, Russia) (1985-1991)*; *MASSACHUSETTS INSTITUTE OF TECHNOLOGY, Cambridge, MA*; *Center for Materials Science and Engineering (1991-1993)*; *ALABAMA A&M UNIVERSITY, Huntsville, AL, (1993-1997)*; and *NORFOLK STATE UNIVERSITY, Norfolk, VA, Department of Physics, Center for Materials Research (1997-present)*.

*Dr. Noginov has published one book, three book chapters, two edited SPIE proceedings volume, over 90 papers in peer reviewed journals, over 100 publications in proceedings of professional societies and conference technical digests (12 of them invited).*

*Dr. Noginov is a member of Sigma Xi, OSA, SPIE, and APS. He has served as a chair and a committee member on several conferences of SPIE and OSA. The biography of Dr. Noginov is published in Who'sWho in America and Who'sWho in the World. He regularly serves on NSF panels and reviews papers for many professional journals. Since 2003, Dr. Noginov is a faculty advisor of the OSA student chapter at NSU.*

*Research interests of Dr. Noginov include Random Lasers, Nanoplasmonics, Solid-State Laser Materials, and Nonlinear Optics.*