

JQE Nobel Prize Winning Author Publications (Current to 1950)

As part of our commemoration of the 50th anniversary of the founding of the journal, we present this list of Nobel Prize winners who have authored or co-authored articles in IQE.

Author	Nobel Prize Yr.	Category	Article Title	Publication Yr.
Hiroshi Amano	2014	Physics	Analysis of lateral-mode behavior in broad-area InGaN quantum-well lasers	2001
Serge Haroche	2012	Physics	The two-photon Rydberg atom micromaser	1988
David J. Wineland	2012	Physics	Optical frequency standards and measurements	2001
John L. Hall	2005	Physics	Ultrasensitive spectroscopy, the ultrastable lasers, the ultrafast lasers, and the seriously nonlinear fiber: a new alliance for physics and metrology	2001
			Optical heterodyne spectroscopy enhanced by an external optical cavity: toward improved working standards	1990
			Principles of optical phase-locking: Application to internal mirror He-Ne lasers phase-locked via fast control of the discharge current	1987
			The laser absolute wavelength standard problem	1968
			3C4 - Two-quantum photoionization of Cs and I-	1966
Theodor W. Hansch	2005	Physics	Laser action of dyes in gelatin	1971
			On pressure broadening in a He-Ne laser	1969
			Observation of saturation peaks in a He-Ne laser by tuned laser differential spectrometry	1968
			Power broadening in a He-Ne laser	1968
Robert H. Grubbs	2005	Chemistry	High T/sub g/ hole transport polymers for the fabrication of bright and efficient organic light-emitting devices with an air-stable cathode	2000
Zhores Alferov	2000	Physics	Wavelength multiplexing DH AlGaAs injection laser source with a graded composition along the active layer	1981
			Semiconductor lasers with the light output through the diffraction grating on the surface of the waveguide layer	1975
			Gain and threshold characteristics of long wavelength lasers based on InAs/GaAs quantum dots formed by activated alloy phase separation	2001
			Monolithically-integrated hybrid heterostructure diode laser with dielectric-film waveguide DBR	1987
Herbert Kroemer	2000	Physics	Enhanced T0values in GaSb/AlSb multiquantum well heterostructures	1987
Daniel C. Tsui	1998	Physics	High-responsivity high-gain In _{0.53} Ga _{0.47} As-InP quantum-well infrared photodetectors grown using metal-organic vapor phase epitaxy	2005
			The fractional quantum hall effect	1986
Horst L. Störmer	1998	Physics	The fractional quantum hall effect	1986
Claude Cohen-Tannoudji	1997	Physics	Photon statistics and quantum jumps: the picture of the dressed atom radiative cascade	1988
Robert F. Curl Jr.	1996	Chemistry	Measurement of nonlinear coefficient and phase matching characteristics of AgGaS ₂	1992
			Computer controlled IR spectrometer using a color center laser	1980
Mario J. Molina	1995	Chemistry	MC7 - Chemical laser studies of vibrational energy distributions: The equal-gain and zero-gain temperature techniques	1973
Norman F. Ramsey	1989	Physics	Large storage box hydrogen maser	1968

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Nicolaas Bloembergen	1981	Physics	Effective mass in picosecond laser-produced high-density plasma in silicon	1986
			Nonlinear optics - Past, present, and future	1984
			Dielectric breakdown threshold, two-photon absorption, and other optical damage mechanisms in diamond	1978
			Laser-induced electric breakdown in solids	1974
			Nonlinear optical coefficients in group IV and III-V semiconductors	1968
			Controlled stimulated Raman amplification and oscillation in hydrogen gas	1967
			6A2 - The influence of self-focusing on the stimulated Brillouin, Raman, and Rayleigh effects	1966
Arthur L. Schawlow	1981	Physics	Lasers in historical perspective	1984
			Simple dye laser repetitively pumped by a xenon ion laser	1973
			Ultrasensitive response of a CW dye laser to selective extinction	1972
			Laser action of dyes in gelatin	1971
Leo Esaki	1973	Physics	A bird's-eye view on the evolution of semiconductor superlattices and quantum wells	1986
Alexander Prokhorov	1964	Physics	Acceleration of relativistic electrons by an intense focused laser radiation combined with a static homogeneous almost collinear magnetic field	1992
			Efficient compression of high-energy laser pulses	1989
			Optical distortion of heated mirrors in CO ₂ -laser systems	1974
			Metal evaporation under powerful optical radiation	1973
			Pulsed CO ₂ laser with double modulation	1969
			Surface and volume scattering, surface-damage, and optical homogeneity studies of ruby crystals and their connection with laser-emission characteristics	1969
			9C2 - CaF ₂ Dy ²⁺ giant pulse laser with high repetition rate	1966
			9B2 - The nature of the laser transition in CdS crystal at 90°K with two-photon excitation	1966
Charles H. Townes	1964	Physics	7B10 - CaF ₂ : Sm ²⁺ +laser with ruby laser excitation	1966
			Ideas and stumbling blocks in quantum electronics	1984
Nikolai G. Basov	1964	Physics	6A1 - A new class of trapped light filaments	1966
			Laser application for investigations of the high-temperature and plasma phenomena	1968
			5A10(a) - Short-pulse Q-switched laser with variable pulse length	1966
			Powerful electroionization laser on Xe infrared atomic transitions	1983
			Hypersonic phase-conjugation mirror for the reflection of high-power nanosecond pulses	1989
			9B4 - Semiconductor lasers with radiating mirrors	1966
			5A10(b) - A laser with a nonresonant feedback	1966
			Efficient pulsed first-overtone CO laser operating within the spectral range of 2.5-4.2 μm	2000
			High-power electroionization CO ₂ and CO lasers for industrial applications	1985
			Dynamics of injection lasers	1968
			Semiconductor streamer lasers	1977
Willis Lamb	1955	Physics	Generation and amplification of ultrashort optical pulses	1968
			2A1(b) - Opening remarks: Fourth International Quantum Electronics Conference	1966
			60 J quasistationary electroionization laser on Xe atomic metastables	1985
			Experiments on the observation of neutron emission at a focus of high-power laser radiation on a lithium deuteride surface	1968
			Laser theory and Doppler effects	1984