

# Resource Summary Report

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## Nikon: A1R Confocal Laser Scanning Microscope

RRID:SCR\_020317

Type: Tool

### Proper Citation

Nikon: A1R Confocal Laser Scanning Microscope (RRID:SCR\_020317)

### Resource Information

**URL:** <https://www.microscope.healthcare.nikon.com/about/news/nikon-instruments-a1-confocal-laser-microscope-series-with-nis-elements-c-software-delivers-fully-integrated-comprehensive-confocal-imaging-capabilities>

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**Description:** A1R model incorporates a hybrid scanner system utilizing a high speed resonant galvanometer capable of acquisitions up to 240 frames per second. Both scanners can be used simultaneously for experiments requiring acquisition and photoactivation by concurrently scanning the specimen. This supports advanced research methods using photoactivation fluorescence proteins and facilitates high-speed, live-cell work with a huge array of new imaging strategies. A spectral imaging detector further enables the A1 and A1R models to obtain up to 32 discrete spectral bandwidths of data in one acquisition, with spectral unmixing capabilities. The total system is controlled through NIS-Elements C applications software, which also enables full control of the Nikon Ti-E research inverted microscope equipped with Nikon's Focus System (PFS), widefield CCD cameras and an array of hardware devices.

**Resource Type:** instrument resource

**Keywords:** Nikon, Confocal Laser Scanning Microscope, Instrument, Equipment, USEdit

**Availability:** Commercially available

**Specification URL:** [https://raw.githubusercontent.com/SciCrunch/RRID-Instruments/refs/heads/main/PDF/SCR\\_020317.pdf](https://raw.githubusercontent.com/SciCrunch/RRID-Instruments/refs/heads/main/PDF/SCR_020317.pdf)

**Resource Name:** Nikon: A1R Confocal Laser Scanning Microscope

**Resource ID:** SCR\_020317

**Alternate IDs:** Model\_Number\_A1R

**Record Creation Time:** 20220129T080349+0000

**Record Last Update:** 20260919T195432+0000

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## Ratings and Alerts

No rating or validation information has been found for Nikon: A1R Confocal Laser Scanning Microscope.

No alerts have been found for Nikon: A1R Confocal Laser Scanning Microscope.

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## Data and Source Information

**Source:** [SciCrunch Registry](#)

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## Usage and Citation Metrics

We found 45 mentions in open access literature.

**Listed below are recent publications.** The full list is available at [NIF](#).

Torii T, et al. (2026) Loss of p53 Provokes NF- $\kappa$ B-Dependent Disruption of Nucleolar Cap and Nucleoplasmic Redistribution of Fibrillarin During Nucleolar Stress. *Biomolecules*, 16(2).

Colah A, et al. (2026) Profiling crystal engineered ligands for targeting treatment resistant androgen receptors. *bioRxiv : the preprint server for biology*.

Davis MN, et al. (2026) Parvalbumin Neuron-Targeted Loss of Alzheimer's Disease Risk Gene BIN1 Is Insufficient to Drive Cognitive or Network Excitability Changes. *eNeuro*, 13(3).

Chehade HD, et al. (2026) Emergence of Task-Related Motor Cortical Dysfunction in Mice with Progressive Parkinsonism. *bioRxiv : the preprint server for biology*.

Contreras J, et al. (2026) Scn2a, encoding Na V 1.2 channel, contributes to tonotopic maturation of spike kinetics in developing mouse MNTB. *Frontiers in cellular neuroscience*, 20, 1819425.

Tai W, et al. (2026) In vivo reprogramming of NG2 glia improves bladder function after spinal cord injury. *iScience*, 29(3), 114850.

Bellofatto K, et al. (2026) Implantable vascularized endocrine constructs for clinically scalable insulin delivery. *Trends in biotechnology*.

Cheung SW, et al. (2026) Size-dependent alterations in phrenic motor neuron perineuronal nets following cervical spinal hemisection. *Journal of neurophysiology*, 136(1), 180.

- Fogarty MJ, et al. (2026) Inflammaging-associated mitochondrial degeneration occurs in hypoglossal motor neurons prior to tongue muscle. *GeroScience*.
- Martinez RC, et al. (2026) Motor Neuron Size-Dependent Differences in mRNA Expression of Tropomyosin-Related Kinase Receptor B in Adult Rats. *Journal of neurochemistry*, 170(2), e70381.
- Bauerdick A, et al. (2026) MorphoMapping identifies redox-dependent control of NETotic states in primed neutrophils. *Journal of immunology (Baltimore, Md. : 1950)*, 215(4).
- Mahadev Bhat S, et al. (2026) Fluorescence-based quantification of mitochondrial damage in human airway smooth muscle cells. *American journal of physiology. Cell physiology*, 330(5), C1336.
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- Tinsley H, et al. (2025) Interleukin-1 $\beta$  Stimulates Matrix Metalloproteinase 10 Secretion: A Possible Mechanism in Trophoblast-Dependent Spiral Artery Remodeling. *FASEB journal : official publication of the Federation of American Societies for Experimental Biology*, 39(9), e70597.
- Metri MN, et al. (2025) Protocol for autofluorescence removal in microglia by photobleaching in free-floating immunofluorescent staining of mouse brain tissue. *STAR protocols*, 6(4), 104199.
- Bergheim BG, et al. (2025) Molecular dynamics of the matrisome across sea anemone life history. *eLife*, 14.
- McCoy C, et al. (2025) Focal postnatal deletion of Tsc2 causes epilepsy. *Frontiers in molecular neuroscience*, 18, 1686023.
- Ning G, et al. (2025) BCAS2 promotes primitive hematopoiesis by sequestering  $\beta$ -catenin within the nucleus. *eLife*, 13.
- Chen L, et al. (2025) Motor cortical neuronal hyperexcitability associated with  $\alpha$ -synuclein aggregation. *NPJ Parkinson's disease*, 11(1), 18.
- Ikefuama EC, et al. (2025) Presymptomatic targeted circuit manipulation for ameliorating Huntington's disease pathogenesis. *iScience*, 28(3), 112022.