

LIST OF PUBLICATIONS

I. Research papers.

- Grinvald A. and M. Rabinovitz. The nuclear magnetic resonance spectra of aromatic aldehyde-boron trifluoride complexes. **Chem. Comm.** *642*, (1969).
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- Salzberg B.M., A. Grinvald, L.B. Cohen, H.V. Davila and W.N. Ross. Optical recording of neuronal activity in an invertebrate central nervous system: Simultaneous monitoring of several neurons. **J. Neurophysiol.** **40**, 1281-1291 (1977).
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- Sterkin A., Lampl I., Ferster D., Grinvald A., Arieli A. (2003). Population activity controls membrane potential dynamic of single cortical neurons. Submitted.
- Jancke Dirk Chavane Frédéric and Amiram Grinvald (2003). Imaging cortical correlates of a visual illusion, Submitted.
- Kenet, T., A. Grinvald, M. Tsodyks, A. Arieli (2003). Dynamics of spontaneous population activity in the cat visual cortex. Submitted.
- Vanzetta I., and A. Grinvald (2003). Direct Visualization of Sensory-Evoked Hemodynamic Responses in the Various Cortical Microvascular Compartments. Submitted
- Petersen C.H., T. Hahn, M. Mehta, A. Grinvald and B. Sakmann (2003) Interaction of sensory responses with spontaneous activity in barrel cortex. Submitted
- Shmuel, A., M. Korman, , M. Harel, R. Malach and A. Grinvald. (2003). Relationship of feedback connections from area V2 to orientation domains in area V1 of the primate.

II. Manuscripts in draft form (published in Abstracts only:

R. Hildesheim and A. Grinvald (2003) Design and synthesis of 83 new voltage-sensitive dyes for in-vivo optical imaging of brain function.

Shmuel N., Seidman, E., and A. Grinvald (2003) The spatio-temporal pattern of the spread of electrical activity evoked by microstimulation imaged with voltage-sensitive dyes.

III. Invited Reviews

Cohen L.B. , B.M. Salzberg and A. Grinvald. Optical methods for monitoring neuron activity. **Ann Rev. Neurosci.** **1**, 171-182 (1978).

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- Grinvald A., R. Hildesheim, D. Shoham, D.E. Glaser, A. Sterkin and A. Arieli (1999). Voltage-sensitive dyes imaging in the neocortex: visualization of coherent neuronal assemblies. Chapter in: "**Imaging of Neuronal Activity**". Cold Spring Harbor Laboratory,. Chapter 50, pp 1-16
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- Ivo Vanzetta, Hamutal Slovin and Amiram Grinvald (2002). Spatio-temporal characteristics of neurovascular coupling in the anesthetized cat and the awake monkey; implications for f-MRI and optical imaging. **International Congress Seires**, Elsevier Science B.V.
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Katz L.C. and Grinvald A. (2002) New technologies; molecular probes, microarrays, microelectrodes, microscopes and MRI, **Current Opinion in Neurobiology**, in press.

IV. Invited Reviews In Preparation

Grinvald A. Optical Imaging. (Invited by *Annual Rev of Neuroscience*).

Grinvald A. Optical Imaging and cerebral metabolism; implications for f-MRI and PET imaging. (*Invited by J. Cerebral Blood Flow and Metabolism*).

Grinvald A. Visualization of on going and evoke cortical dynamics. (Invited by *Nature Reviews in Neuroscience*.)