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## PUBLICATIONS

### Invited Reviews

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- "Resonance Raman Techniques for Photolabile Samples: Pump-Probe and Flow", R. Callender, in *Visual Pigments and Purple Membranes*, *Methods of Enzymology* (eds. Colowick, Kaplan, and L. Packard), Academic Press, 1982.
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- "The First Picosecond in Vision", in *Cell Structure and Function by Microspectrofluorometry*, R. H. Callender, eds. Elli Kohen and Joseph Hirschberg (Academic Press, New York, 1989), pp. 185-198.
- "Enzymatic Catalysis and Molecular Recognition: The Energetics of Ligand Binding to Proteins as Studied by Vibrational Spectroscopy", H. Deng and R. H. Callender, *Comments on Molecular and Cellular Biophysics* **8**, 137 (1993).
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- "Protein Physics", Robert Callender, Rudolf Gilmanishin, Brian Dyer, and William Woodruff, in *Physics World*, ed. Philip Campbell (Techno House, Bristol, UK), Vol. 7 (August Issue), pp.41-45 (1994).
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- "Infrared Studies of Fast Events in Protein Folding", R. Brian Dyer, Feng Gai, William H. Woodruff, Rudolf Gilmanishin, and Robert Callender, *Accs. Chem. Res.* **31**, 709-716 (1998).
- "Raman Observations of Bound Substrate Structure and Distortion", Robert Callender and Hua Deng, in *Methods in Enzymology* **308**, 'Energetics of Enzymic Processes', part E of 'Enzyme Kinetics and Mechanism', 176-200 (1999).
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- "Vibrational Studies of Enzymatic Catalysis", Hua Deng and Robert Callender, in *Infrared and Raman Spectroscopy of Biological Materials*, eds. Hans-Ulrich Gremlich and Bing Yan, (Marcel Dekker, Inc., New York, pp.1-581), pp. 477-515 (2001).
- "Probing Protein Dynamics Using Temperature Jump Relaxation Spectroscopy", Robert Callender, and R. Brian Dyer, *Current Opinion in Structural Biology* **12**, 628-633 (2002).

- "Time-Resolved Approaches to Characterize the Dynamical Nature of Enzyme Catalysis", Robert Callender and R. Brian Dyer, *Chemical Reviews* **106**, 3031-3042 (2006).
- "Spectroscopic Probes of Hydride-Transfer Activation by Enzymes", *Hydrogen-Transfer Reactions, Vol. 4 (Biological Aspects of Hydrogen Transfer III-IV)*, J. T. Hynes, J. P. Klinman, H.-H. Limbach, and R.L. Schowen, eds. (Wiley VCH, Weinheim), 2007, pp. 1393-1415.
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