

Referências Bibliográficas

- ACAR, H.Y. KAS, R.; YURTSERVER, E.; OZEN, C.; LIEBERWIRTH, I. Emergence of 2MPA as an Effective Coating for Highly Stable and Luminescent Quantum Dots. **The Journal of Physical Chemistry C**, v.113, p. 10005-10012, 2009.
- ALIVISATORS, A.P.; GU W.; LARABELL, C. Quantum dots as cellular probes. **Annual Review of Biomedical Engineering**, v. 7, p. 55-76, 2005.
- ALMEIDA, D.B. **Pontos quânticos coloidais de semicondutores II-VI encapados com SiO₂.** Campinas, 2008. 64p. Dissertação de Mestrado, Universidade Estadual de Campinas.
- ALVES, A.M.P.; ALVES E.P.B.; BUTTOW, N.C.; PERLES, J.V.C.M.; ZANONI, J.N.; Stabille, S.R. Aspectos gerais e abordagem terapeutica da quer cetina sobre as complicações do diabetes causadas pelo estresse oxidativo. **Arquivos de Ciências da Saúde**, v. 14, p. 179-186, 2010.
- ANDERSEN, O.M.; WEBSTER, F.X.; KIEMLE, D.J. **Flavonoids: Chemistry, Biochemistry and Application.** London: Taylor *et al.*, p. 471-553, 2006.
- ARABBI, P.R.; GENOVESE, M.I.; LAJOLLO, F.M. Flavonoids in vegetable foods commonly consumed in Brazil and estimated ingestion by the Brazilian population. **Journal of Agricultural and Food Chemistry**, v. 52, p. 1124-1131, 2004.
- ARAÚJO, M.E.M.B. **Avaliação das atividades antioxidantes e antiproliferativa da rutina e seus produtos obtidos por hidrólise enzimática.** 2012. Dissertação de Mestrado, Universidade de São Francisco.
- ARI, T.; FIJURMIRA, H.; UMEZU, I.; OGAWA, T.; FUJI, A. Effect of size confinement on the electronic states of CdS cluster in a germanium oxide matrix. **Journal of Applied Physics**, v.28, p. 484-489, 1989.

AUCÉLIO, R. Q.; PERÉZ-CORDOVÉZ, A.I.; LIMA, J.X.L.; FERREIRA, A.B.B.; DA SILVA, A.R. Determination of lapachol in the presence of others naphtoquinones using 3MPA-CdTe quantum dots fluorescent probe. **Spectrochimica Acta Part A**, v. 100, p. 155-160, 2013.

BANYAI, L.; KOCH, S.W. **Semiconductor quantum dots**. Brithish Library Cataloguing-in-publication data. World Scientific series on Atomic, Molecular and Optical Physics, v. 2, 2005.

BARNES, J.; ANSERSON L.A.; PHILLIPSON, J.D. St John's wort (*Hypericum perforatum* L). A review of its chemistry, pharmacology and clinical properties. **Journal of Pharmacy and Pharmacology**, v. 53, p. 583-600, 2001.

BECHO, J.R.M.; MACHADO, H.; GUERRA, M.O. Rutina – Estrutura, Metabolismo e Potencial Farmacológico. **Revista Interdisciplinar de Estudos Experimentais**, v. 1, p. 21 - 25, 2009.

BEECHER, G. et al. Screening of foods containing proanthocyanidins and their sctructural characterization using LC-MS;MS and thiolytic degradation. **Journal of Agricultural and Food Chemistry**, v. 51 (25), p. 7513-7521, 2003.

BEHLING, E.B.; SENDÃO, M.C.; FRANCESCATO, H.D.C.; ANTUNES, L.M.G., BIANCHI, M.L.P. Flavonóide Quercetina: Aspectos gerais e ações biológicas. **Alimentos e Nutrição Araraquara**, v. 15, p. 285-292, 2004.

BESEL, E. **Use of Triton X114 aqueous two phase system for recovery of Mushroom (*Agaricus Bisporus*) poliphenoloxidases**. The Middle East Technical University, 2003, 85p.

BLASCO, A.J.; GONZALEZ, M.C.; ESCARPA, A. Electrochemical approach for discriminationg and measurement predominant flavonoids and phenolics acids using differential pulse voltammetry.: towards an electrochemical index of natural antioxidants. **Analytica Chimica Acta**, v. 511, p. 71–81. 2004.

BO, C.; PING, Z. A new determination method of copper (II) ions at ng mL⁻¹ levels based on quenching of the water soluble nanocrystals fluorescence; **Analytical and Bioanalytical Chemistry**, v. 381, p. 986-992, 2005.

BOEV, V.I.; SILVA, C.J.R.; GOMES, M.J.M. **Métodos químicos de síntese de pontos quanticos (QD) de semicondutores.** Trabalho publicado no livro Nanoestruturas semiconductoras – Fundamentos y aplicaciones. Editores: Sanchez, J.T.; Rodriguez-Copolla, H.G.; Armelles-Reig, p. 180-194, 2003.

BOHETS, H.; ANNAERT, P.; MANNENS, G.; VAN BEIJTERVELDT, L.; ANCIAUZ, K.; VERBOVEN, P.; MEULDERMAN, W.; LAVRIJSEN, K. Strategies for absorption in drug discovery and development. **Current Topics in Medicinal Chemistry**, v.1, p. 367-383, 2001.

BONINA, F. MONTENEGRO, L.; SCROFANII, N.; ESPÓSITO, E.; CORTESI, R.; MENEGATTI, E.; NASTRUZZI, C. Effects of phospholipid based formulations on in vitro and in vivo percutaneous absorption of methyl nicotinate. **Journal of Controlled Release**, v.34, p. 53-63, 1995.

CACHETAS, J.H.R.S. **Desenvolvimento e ensaios biológicos de bionanossistemas baseados em pontos quânticos de CdSe/ZnS.** 2013. Dissertação de Mestrado. Universidade do Minho

CAI, Z-X.; YANG, H.; ZHANG, Y.; YAN, X-P. Preparation, characterization and evaluation of water-soluble L-cysteine-capped-CdS nanoparticles as fluorescence probe for detection of Hg (II) in aqueous solution. **Analytical Chimica Acta**, v.559, p. 234-239, 2006.

CALABRO, M. L. THOMMASINI, S.; DONATO, P.; STANCANELLI, R.; RANERI, D.; CATANIA, S.; COSTA, C.; VILLARI, V.; FICARRA, P.; FICARRA, R. The rutin;β-cyclodextrin interactions in fully aqueous solution. Spectroscopy studies and biological assays. **Journal of Pharmaceutical and Biomedical Analysis**. v. 36, p. 1019–1027, 2005.

CARERI, M.; ELVIRI, L.; MANGIA, A.; MUSCI, M. Spectrophotometric and coulometric detection in the high-performance liquid chromatographic of flavonoids and optimization of sample treatment for the determination of quercetin in orange juice. **Journal of Chromatography Part A**, v. 881, p. 449-460, 2000.

CARVALHO, J.M.; LEANDRO, K.C.; DA SILVA, A.R.; AUCÉLIO, R.Q. Selective determination of rutin by fluorescence attenuation of the CdS-

2mercaptopropionic acid nanocrystals probe. **Analytical Letters**, v. 46, p. 207-224, 2013.

CASTRO, I.F.C. **Materiais nanoestruturados. Estruturas de carbono, nanopartículas, nanocapsulas e quantum dots. Casos de estudos em nanobiotecnologia.** 2010. Tese de Doutorado, Universidade de Aveiro.

CHEN, Y.; ROSENZWEIG, Z. Luminescent CdS quantum dot as selective ion probe. **Analytical Chemistry**, v. 74, p. 5132- 5138, 2002.

CHEN C.; ZHOU, J.J.I. Quercetin: A potential drug to reverse multidrug resistance. **Life Sciences**, v. 87, p. 333–338, 2010.

CHEN, J.-; ZHU, C-Q. Functionalized cadmium sulfide quantum dots as fluorescence probe for silver ion determination. **Analytica Chimica Acta**, v. 546, p. 147-153, 2005.

COSTA-FERNANDEZ, J.; PEREIRO, R.; SANZ-MEDEL, A. The use of luminescent quantum dots for optical sensing. **Trends in Analytical Chemistry**, v. 25, p. 207-218, 2006.

DÁVILA, Y.A.; SANCHO, M.I.; ALMANDOZ, M.C.; BLANCO, S.E. Solvent effects on the dissociation constants of hydroxyflavones in organic-water mixtures. Determination of the Termodynamic pKa values by UV-Visible Spectroscopy and DFT Calculations. **Journal of Chemical Engine Data**, v.58, p. 1706-1716, 2013.

DA SILVA, J.H.R. **Desenvolvimento e ensaios biologicos de bionanossistemas baseados em pontos quanticos de CdS-ZnS.** Tese de Mestrado, Universidade do Minho, 2013.

DEGÁSPARI, C.H.; WASCZYNSKYJ, N. Propriedades antioxidantes de compostos fenólicos. **Visão acadêmica**, v. 5, p. 33-40, 2004.

DIAS, D.B. **Propriedades ópticas de pontos quânticos semicondutores de InAs;GaAs.** Trabalho de conclusao de curso, Universidade Tecnológica Federal do Paraná, 2011.

DONEGÁ, C.M.; LILJEROTH, P.; VANMAEKELBERGH, D. Physicochemical evalution of the hot-injection method, a synthesis route for monodisperse nanocrystals, **Small**, v. 1, p. 1152-1162, 2005.

DONGRI, J.; HIDEKI, H.; KOUJI, T.; AKIRA, K.; FUMIYO, K. Determination of quercetin in human plasma after ingestion of commercial canned green tea by semi micro HPLC with electrochemical detection. **Biomedical Chromatography**, v. 18, p. 662-666, 2004.

DORNAS, W.C.; OLIVEIRA, T.T.; DAS DORES, R.G.R.; SANTOS, A.F.; NAGEM, T.J. Flavonóides: potencial terapeutico no estresse oxidativo. **Revista de Ciências Farmacêuticas Básica e Aplicada**, v. 28, p. 241-249, 2007.

EKIMOV, A.I.; ONUSCHENKO, A.A. Quantum Size Effect in the Optical-Spectra of Semiconductor Micro-Crystals. **Sovietic Physics Semiconductors**, v. 16, p. 775-778, 1982.

FELDMAN, K.A. Cytochrome p450s as gene for crop improvement. **Current Opinion in Plant Biology**, v. 4, p. 162-167, 2001.

FORMICA, J.V.; REGELSON, W. Review of the biology of quercetin and related bioflavonoids. **Food and Chemical Toxicology**, v. 33, p. 1061-1080, 1995.

FRANZOI, A.C.; SPINELLI, A.; VIEIRA, I.C. Rutin determination in pharmaceutical formulations using a carbon paste electrode modified with poly(vinylpyrrolidone). **Journal of Pharmaceutical and Biomedical Analysis**, v. 47, p. 973-977, 2008.

FURDYNA, J.K. Diluted magnetic semiconductors. **Journal of Applied Physics** v. 64, p. R29-R64, 1988.

GALIAN, R.E.; DE LA GUARDIA, M. The use of quantum dots in organic chemistry. **Trends in Analytical Chemistry**, v. 28, p. 279-291, 2009.

GANG, C.; HONGWEI, Z.; JIANNONG, Y. Determination of rutin and quercetin in plants by capillary electrophoresis with electrochemical detection. **Analytica Chimica Acta**, v. 423, p. 69-76, 2000.

GAO, M.; KIRSTEIN, S.; MOHWALD, H. Strongly Photoluminescent CdTE Nanocrystals by Proper Surface Modification. **Journal of Physical Chemistry Part B**, v. 102, p. 8360-8363, 1998.

GAPONIK, N.; TALAPIN, D.V.; ROGACH, A.L.; HOPPE, K.; SCHEVCHENKO, E.V.; KORNOWSKI, A.; WELLER, H. Thiol-capping of

CdTe Nanocrystals: an alternative to ornometallic synthetic Routes. **Journal of Physical Chemical Part B**, v. 106, p. 7177-7185, 2002.

GOCAN, S. Stationary Phases for Thin-Layer Chromatography. **Journal of Chromatographic Science**, v. 40, p. 1-12, 2002.

GOEDON, M.H.; ROEDIG-PENMAN, A. Antioxidant activity of quercetin and myricetin in liposomes. **Chemistry and Physics of lipids**. v. 97, p. 79-85, 1998.

GU, Z.; ZOU, L.; FANG, Z.; ZHU, W.; ZHONG, X. One-pot synthesis of highly luminescent CdTe/CdS core/shell nanocrystals in aqueous phases. **Nanotechnology**, v.19. p. 1-7, 2008.

GULLAPALLI, S.; BARRON, A. R. Physical Methods in Chemistry and Nano Science. Disponível em: <https://archive.org/stream/ost-chemistry-col10699/col10699#page/n3/mode/2up> Acesso em: 19 fev.2014.

HAN, S-Q.; ZHAO, S-M. A Novel Method for Uric Acid Determination Using CdS Quantum Dots as Fluorescence Probes. **Journal of the Chinese Chemical Society**, v. 56, p. 1156-1162, 2009.

HARANATH, D. Luminescent Quantum Dots and doped-Nanocrystals for Energy Saving Applications. **International Journal of Luminescence and Applications**, v. 2, p. 126-144, 2012.

HASSIMOTTO, N.M.A.; GENOVESE, M.I.; LAJOLO, F.M. Antioxidant Activity of Dietary Fruits, Vegetables, and Commercial Frozen Fruit Pulps. **Journal of Agricultural and Food Chemistry**, v. 53, p. 2928-2935, 2005.

HEIJNEM, C.G. et al. Protection of flavonoids against lipid peroxidation: the structure activity relationship revisited. **Free Radical Research**, v.36, p. 575-581, 2002.

HERTOG, M.G.L.; HOLLMAN, P.C.H.; VENEMA, D.P. Optimization of a quantitative HPLC determination of potentially anticarcinogenic flavonoids in vegetables and fruits. **Journal of Agricultural and Food Chemistry**, v. 40, p. 1591-1598, 1992.

HOLLMAN, P.C.H.; VANDERGAAG, M.; MENGEVERS, M.J.B.; VAN TRIJIP, J.M.P.; DE VRIES, J.H.; KATAN, M.B. Absorption and disposition

kinetics of the dietary antioxidant quercetin in man. **Free Radical Biology and Medicine**, v. 21, p. 703-707, 1996.

HORIBA, J.Y. A guide to recording fluorescence quantum yield. Disponível em: www.horiba.com/fileadmin/uploads/Scientific/Documents/Fluorescence/quantum_yieldstrad.pdf

HUBER, L.S.; RODRIGUEZ-AMAYA, D.B. Flavonóis e flavonas: Fontes brasileiras e fatores que influenciam a composição em alimentos. **Alimentos e Nutrição**, v.19, p. 97-108, 2008.

HUI, C.; QI, X.; QIANYONG, Z.; XIAOLI, P.; JUNDONG, Z.; MANTIAN, M. Flavonoids. 2013. Flavonoids Subclasses and Breast Cancer Risk: A Meta-Analysis of Epidemiologic Studies. **PLoS ONE** 8(1): e54318. doi:10.1371

INAL, M.E.; KAHRAMAN, A. The protective effect of flavonol quercetin against ultraviolet a induced oxidative stress in rats. **Toxicology**, v. 154, p. 21-29, 2000.

INGERT, D.; PILENI, M.P. Limitation in producing nanomaterials by using reverse micelles as nanoreactors. **Advanced Functional Materials**, v. 11, p. 136-139, 2001.

INSTITUTO NACIONAL DE METROLOGIA, QUALIDADE E TECNOLOGIA. **DOQ-CGCRE-008:** Orientação sobre Validação de Métodos Analíticos. Rev. 04. 2011.

JAVADIAN, S.; RUHI V.; HEYDARI, A.; SHARIR, A.; YOUSEFI, A.; AKBARI, J. Self-Assembled CTAB nanostructures in aqueous/ionic liquid systems: Effects of hydrogen bonding. **Industrial and Engineering Chemistry Research**, v. 52, p. 4517-4526, 2013.

JONES, D.J.L.; LIM, C.K.; FERRY, D.R.; GESCHER, A. Determination of quercetin in human plasma by HPLC with spectrophotometric or electrochemical detection. **Biomedical Chromatography**, v. 12, p. 232-235, 1998.

KARAM, T.K.; DALPASSO, L.M.; CASA, D.M.; DE FREITAS, G.B.L. Carqueja (*Baccharis trimera*): utilização terapêutica e biossíntese. **Revista Brasileira de Plantas Medicinais**, v. 15, p. 280-286, 2013.

LAN, G-Y.; LIN, Y-W.; HUANG, Y-F.; CHAN, H-T. Photo assisted synthesis of highly fluorescent ZnS(S) quantum dots ins aqueous solution. **Journal of Materials Chemistry**, v. 17, p. 2661-2666, 2007.

LAKOWICZ, J.R. **Principles of Fluorescent Spectroscopy**. 3.ed. New York: Springer, 2006. 954p.

LI, Y.; CHEN, J.; ZHU, C.; WANG, L.; ZHAO, D.; ZHUO, S.; WU, Y. Preparation and application of cysteine-capped ZnS nanoparticles as fluorescence probe in the determination of acid nucleics. **Spectrochimica Acta Part A**, v. 60, p. 1719-1724, 2004.

LI, L.; QIAN, H.; FANG, N.; REN, J. Significant enhancement of the quantum yield of CdTe nanocrystals synthesized in aqueous phase by controlling the pH and concentrations of precursor solutions. **Journal of Luminescence**, v. 116, p. 59-66, 2006.

LI, C.L.; NISHIKAWA, K.; ANDO, M.; ENDOMOTO, H.; MURASE, N. Highly luminescent water-soluble ZnSe nanocrystals and theirs incorporation in a glass matrix. **Colloids and Surface A**, v. 294, p. 33-39, 2007.

LI, N.; LUO, H.; LIU, S. A new method for the determination of critical micelle concentration of Triton X100 in the absence and presence of beta-cyclodextrin by resonance Rayleigh scattering technology. **Spectrochim Acta Part A: Molecular and Biomolecular Spectroscopy**, v. 60, p. 1811-1815, 2004.

LIANG, J.; HUANG, S.; ZENG, D.; HE, Z.; JI X.; AI X.; YANG, H. CdSe quantum dots as luminescent probes for spirolactone determination. **Talanta**, v. 15, p. 126-130, 2006.

LIMA, J.X.; PÉREZ-GRAMATGES, A.; AUCÉLIO, R.Q.; DA SILVA, A.R. Improved quantum dots fluorescence quenching using organized medium. A study the effect of naphtoquinones aiming the analysis of plant extracts. **Microchemical Journal**, v. 110, p. 775-782, 2013.

LIN, M.; ANDERSON, H.; FIVIN, M.T.; PAI, Y.S. In vitro anti- HIV activity of bioflavonoids isolated from rhus sucedanea and garciania multiflora. **Journal Natural Products**, v. 60, p. 884-888, 1997.

LIU, M.; XU, L.; CHENG, W.; ZENG, Y.; YAN, Z. Surface modified CdS quantum dots as luminescent probes for sulfadiazine determination. **Spectrochimica Acta Part A**, v. 70, p. 1198-1202, 2008.

MACHADO, H.; NAGEM, T.J.; PETERS, V.M.; FONSECA, C.S.; OLIVEIRA, T.T. Flavonóides e seu potencial terapêutico. **Boletim do Centro de Biologia de Reprodução**, v. 27, p. 33-39, 2008.

MACHADO, H. **Atividade dos flavonoides rutina e naringina sobre o tumor ascítico de Erlich “in vitro”**. Dissertação de Mestrado, Universidade Federal de Viçosa, 2005.

MANACH, C.; WILLIAMSON, G.; MORAND, C.; SCALBERT, A.; REMESY, C. Bioavailability and bioefficacy of polyphenols in humans: review of 97 bioavailability studies. **American Journal of Clinical Nutrition**, v. 81, p. 230-242, 2005.

MANACH, C.; MORAND, C.; CRESPY, V.; DEMIGNE, C.; TEXIER, O.; RÉGÉRAT, F.; RÉMÉSY, C. Quercetin is recovered in human plasma as conjugated derivates which retain antioxidant properties. **FEBS Letters**, v. 426, p. 331-336, 1998.

MARCHAND, L.L. Cancer preventive effects of flavonoides- a review. **Biomedicine and Pharmacotherapy**, v. 56, p. 296-301, 2002.

MARTINS, M.A.; TRINDADE, T. Os nanomateriais e a descoberta de novos munods na bancada do químico. **Química Nova**, v. 35, p. 1434-1446, 2012.

MATOS, C.R.S. **Síntese e caracterização de nanopartículas de semicondutores metálicos do tipo II-VI**. Dissertação de Mestrado, Universidade Federal de Sergipe, 2012.

MICHALET, X, PINAUD, F.F.; BENTOLILA, L.A.; TSAY, J.M.; DOOSE, S.; LI, J.J.; SUNDARESAN, G.; WU, A.M.; GAMBHIR, S.S.; WEISS,S. Quantum dots for live cells, in vivo imaging, and diagnostics. **Science**, v. 307, p. 538-554, 2005.

MIDDLETON, E.; KANDASWAM, C., THEOHARIDES, T.C. The effects of plant flavonoids on mammalian cells: implications for inflammation, heart disease and cancer. **Pharmacological Reviews**, v. 53, p. 673-751, 2000.

MOLINA-GARCIA, L.; SANTOS, J.L.M.; RUIZ-MEDINA, A.; LIORENT-MARTINEZ, E.J. Determination of ketoprofen based on its quenching effects in the fluorescence of quantum dots. **Journal of Food and Drug Analysis**, v. 21, p. 426-431, 2013.

MOORE, D.E., PATEL, K.Q. CdS Photoluminescent Activation on Zn²⁺ and Cd²⁺ salt introduction. **Langmuir**, v. 17, p. 2541-2544. 2001.

MURRAY, C.B.; NORRIS, D.J.; BAWENDI, M.G. Synthesis and characterization of nearly monodisperse CdE (E=sulfur, selenium, tellurium) semiconductor nanocrystallites. **Journal of the American Chemical Society**, v. 115, p. 8706-8715, 1993.

NIRMAL, M.; BRUS, L. Luminescence photophysics in semiconductor nanocrystals. **Accounts of Chemical Research**, v. 32, p. 407-414. 1999.

NOSE, K.; FUJITA, H.; OMATA, T.; MATSUO S.-Y.; NAKAMURA, H.; MAED, H. Colloidal CdSe Nanocrystals Passivated by a Dye-LAbel's Multidentate Polymer: Quantitative Analysis by Size-Exclusion Chromatography. **Chemie International Edition**, v. 45, p. 2221-2224, 2006.

Numata, Y.; Tanaka, H. Quantitative analysis of quercetin using Raman spectroscopy. **Food Chemistry**, v.126, p. 751-755, 2011.

OLHAR NANO. O Universo Nano ao seu alcance. Quantum Dots: Relação entre a cor e o tamanho das partículas. Disponível em: <http://www.olharnano.com/artigos/4001/165001/Quantum-dots:-Relação-entre-a-cor-e-o-tamanho-da-part%C3%ADcula>. Acesso em: 22 fev. 2014.

OLTHOF, M.R.; HOLLMAN, P.C.; VREE, T.B.; KATAN, M.B. Bioavailabilities of quercetin-3- glucoside anda quercetin-4'-glucoside do not differ in humans. **The Journal of Nutrition**, v. 130, p. 1200-1203, 2000.

PARK, J.; JOO, J.; KWON, S.G.; JANG, Y.; HYEO, T. Synthesis of monodisperse spherical nanocrystals. **Angewandte Chemie International Edition**, v. 46, p. 4630-4660, 2007.

PATHAK, D.; PATHAK, K.; SINGLA, A.K. Flavonoids as medicinal agents: recent advances. **Fitoterapia**, v. 57, p. 371-389, 1991.

PEDRIALI, C.A. Síntese química de derivados hidrossolúveis da rutina: determinação de suas propriedades físico-químicas e avaliação de suas atividades antioxidantes. 2005. Dissertação de Mestrado, Universidade de São Paulo.

PEJIC, N.; KUNTIC, V.; VUJIC, Z.; MICIC, S. Direct spectrophotometric determination of quercetin in the presence of ascorbic acid. **II Fármaco**, v. 59, p. 21-24, 2004.

PENG, X.; SCHLAMP, M.C.; KADAVANICH, A.V.; ALIVISTORS, A. P. Epitaxial Growth of Highly Luminescent CdSe;CdS Core;Shell Nanocrystals with Photostability and Electronic Accessability. **Journal of the American Chemical Society**, v. 119, p. 7019-7029, 1997.

PENG, J.; XIAOYA, H. A simple fluorescence quenching method for roxithromycin determination using CdTe quantum dots as probes. **Journal of Luminescence**, v. 131, p. 952-955, 2011.

PIETTA, P.G. Flavonoids as antioxidants. **Journal of Natural Products**, v. 63, p. 1035-1042, 2000.

PRIOR, R.L.; CAO, G. Antioxidant phytochemicals in fruits and vegetables. Diet and health implication. **HortScience**, v. 35, p. 588-592, 2000.

QUINA, F.H. Nanotecnologia e o meio ambiente: perspectivas e riscos. **Química Nova**, v. 27, p. 1028-1029, 2004.

RAMANERY, F.P. Síntese e Caracterização de Nanopartículas Semicondutoras com Estrutura tipo “Núcleo/Casca” CdSe/CdS obtidas por Rota Coloidal Aquosa. Dissertação de Mestrado, Universidade Federal de Minas Gerais, 2012.

ROGASH, A.L.; KATSIKAS, L.; KORNOWSKI, A.; SU, D.; EYCHMULLER, A.; WELLER, H. Synthesis and Characterization of Thiol-Stabilized CdTe Nanocrystals. **Berichte der Bunsengesellschaft fur Physikalische Chemie**, v. 100, p. 1772-1778, 1996.

SAMIR, T.M.; MANSOUR, M.M.; KAZMIERCZAK, S.C.; AZZAZY, H.M. QUANTUM Dots: Heraldng a Brighter Future for Clinical Diagnostics. **Naanomedicine**, v. 7, p. 1755-1769, 2012.

SAVIC, I.M.; NIKOLIC, V.D.; SAVIC, I.M.; NIKOLIC, L.B.; STANKOVIC, M.Z. Development and validation of a new RP-HPLC method for determination of quercetin in green tea. **The Journal of Analytical Chemistry**, v. 68, p. 906-911, 2013.

SESINK, A.L.A.; OILEARY, K.A.; HOLLMAN, P.C.H. Quercetin glucoronides but not glucosides are present in human plasma after consuption of quercetin-3-glucoside or quercetin-4'-glucoside. **The Journal of Nutrition**, v. 131, p. 1938-1941, 2001.

SHABEL, A.; GAPONIK, N. **The Journal of Physical Chemistry Part B**, v. 108, 5905. 2004.

SHEN, Y.; LIU, S.; WANG, J.; LI, D.; HE, Y. Determination of ellagic acid by fluorescence quenching method with glutathione capped CdTe quantum dots as the probe. **Analytical Methods**, v. 5, p. 3228-3234, 2013.

SILVA, M.M.; Santos, M.R.; Caroço, G.; Rocha, R.; Justino, G.; Mira, L. Structure-antioxidant activity relationships of flavonoids a re-examinatio. **Free Radical Research**, v. 36, p. 1219-1227, 2002.

SILVA, F.O.; VIOL, L.C.S.; FERREIRA, D.L.; ALVES, J.L.A.; SCHIAVON, M.A. O estado da arte da síntese de semicondutores nanocristalinos coloidias. **Quimica Nova**, v. 33, p. 1933-1939, 2010.

SILVA, L.F.C. **Desenvolvimento de microesferas lipídicas contendo quercetina para a administração pulmonar visando o tratamento de asma**. 2011. Dissertação de Mestrado, Universidade Federal de Santa Catarina.

SOTOMAYOR, M.D.P.T.; DIAS, I.L.T.; MOREIRA, A.B.; KUBOTA, L.T. Aplicação e avanços da espectroscopia de luminescencia em análises farmaceuticas. **Química Nova**, v. 31, p. 1755-1774, 2008.

SUGIHARA, N.; ARAKAWA, T.; OHNISH, M.; FURUNO, K. Anti- and pro-oxidative effects of flavonoids on metal-induced lipid hydroperoxide-dependent

lipid peroxidation in cultured hepatocytes loaded with α -linolenic acid. **Free Radical Biology & Medicine**, v. 27, p. 1313-1323, 1999.

TANG , D.; YIN, X.; ZHANG, Z.; GAO, Y.; WEI, Y.; CHEN, Y.; HAN, L. Comparative Study on the Pharmacokinetics of *Ginkgo biloba* Extract between Normal and Diabetic Rats by HPLC-DAD. **Latin American Journal of Pharmacy**, v. 28, p. 400-408, 2009.

TANG, D.; YANG, D.; TANG, A.; GAO, Y.; JIANG, X.; MOU, J., YIN, X. Siimultaneous chemical fingerprint and quantitative analysis of *Ginkgo biloba* extract by HPLC-DAD. **Analytical and Bioanalytical Chemistry**. v. 396, p. 3087-3095, 2010.

THOMPSON, M.; WILLIAMS, C.R. Stability of flavonoid complexes of copper (II) and flavonoid antioxidant activity. **Analytica Chimica Acta**, v. 85, p. 375-381, 1976.

TORCHYNSKA, T.; VORBIEV, Y. Semiconductor II-VI quantum dots with interface states and their biomedical applications. **Advanced Biomedical Engineering**, p. 143-182, 2011.

VAN DE WEET, M. Fluorescent quenching to study protein-ligand binding: common erros. **Journal of Fluorescence**, v. 20, p. 625-629, 2010.

VIOL, L.C.S.; SILVA, F.O.; FERREIRA, D.; ALVES, J.L.A.; SCHIAVON, M.A. Precipitação seletiva de tamanhos em nanoaprticulas semicondutoras coloidias de CdTe e CdSe: Um estudo por espectroscopia UV-Vis. **Quimica Nova**, v. 34, p. 595-600, 2011.

XU, Y.; SALIM, N.A.; BUMBY, C.W.; TILLEY, R. D. Synthesis of SnS Quantum dots. **Journal of the American Chemical Society**, v. 131, p. 15990-15991, 2009.

Walle, T. **Understanding the bioavailability of flavonoids through studies in Caco-2 cells**, In: Rice-Evans, C.A; Cadeans, E., Packer, L. editors. Flavonoids in Health and Disease. 2. ed. New York. p. 349-362, 2003.

WANG, F.M.; YAO, T.W.; ZENG, S. Determination of quercetin and kaempferol in human urine after orally administrated of *ginkgo biloba* extract by HPLC. **Journal of Pharmaceutical and Biomedical Analysis**, v. 33. p. 317-321, 2003.

YANG, B.; LIU, R.; HAO, X.; WU, Y.; DU, J. The Interactions of Glutathione-Capped CdTe Quantum Dots with Trypsin. **Biological Trace Element Research**, v. 146, p. 396–401, 2012.

YU, W.W.; QU, L.; GUO, W.; PENG, X. Experimental determination of the extinction coefficient of CdTe, CdSe, and CdS nanocrystals. **Chemistry of Materials**, v. 15, p. 2854-2860, 2003.

YUAN, J.; GUO, W.; WANG, E. Utilizing a CdTe quantum dots-enzyme hybrid system for the determination of both phenolic compounds and hydrogrn peroxide. **Analytical Chemistry**, v. 80, p. 1141-1145, 2008.

Zarbin, A.J.G. Química de nanomateriais. **Química Nova**, v. 30, p. 1469-1479, 2007.

ZHANG, M-F.; FU, L.; WANG, J.; XU, Z-Q.; JIANG, F-L., LIU,Y. Spectroscopic and electrochemical studies on the interaction of an inclusion complex of b-cyclodextrin;fullerene with bovine serum albumin in aqueous solution. **Journal of Phtochemistry and Photobiology: Chemistry**, v. 228, p. 28-37, 2012.

ZHANG, H.; WANG, L.P.; XIONG, H.M.; HU, L.H.; YANG, B.; LI, W. Hydrotermal Synthesis for High-Quality CdTe Nanocrystals. **Advanced Materials**, v. 15, p. 1712-1715, 2003.

ZHANG, H.; CUI, Z.; WANG, Y.; ZHANG, K.; JI, X.; LU, C.; YANG, B.; GAO, M.Y. **Advanced Functional Materials** v. 15, p. 777, 2003b.

ZHANG, M.; PING, H.; CAO, X.; LI, H.; GUAN, F.; SUN, C.; LIU, J. Rapid determination of melamine in milk using water soluble CdTequantum dots as fluorescent probes. **Food Additives and Contaminants Part A, Chem Anal. Control Expo Risk Assess**, v. 2012, p. 333-344, 2012.

ZHAO, W.; FUNG, Y.O.W.; CHEUNG, M.P. L-cysteine-capped quantum dots as fluorescence probe determination of cardiolipin. **Analytical Sciences** v. 26, p. 879-884. 2010.

ZHAO, S-M., HAN, S-Q. Thioglycolic acid capped CdS quantum dots as fluorescence probe for ultrassensitive determinatiob of tetracycline and

oxytetracycline. **Journal of the Chinese Chemical Society**, v. 57, p. 1353-1360, 2013.

ZHENG, B.; WEI, S.; XIAO, F.; ZHAO, F. Voltammetric behavior and determination of rutin at a single-walled carbon nanotubes modified gold electrode. **Sensors and Actuators Part B**. v. 115, p. 240–246, 2006.

ZIELINSKA, D.; NAGELS, N.; PISKULA, M.K. Determination of quercetin and its glucosides in onion by electrochemical methods. **Analytica Chimica Acta**, v. 617, p. 22-31, 2008.

ZOULIS, N.E.; EFSTATHIOU, C.E. Prreconcentration at a carbon paste electrode and determination by adsorptive stripping voltammetry of rutin and others flavonoids. **Analytica Chimica Acta**, v. 320, p. 255-261, 1996.

ANEXO 1

Tabela de Cochran: Valores de G, segundo o número de determinações (k), o grau de liberdade (ν)
e $\alpha = 5\%$

$\frac{\nu}{k}$	1	2	3	4	5	6	7	8	9	10
2	0.9985	0.9750	0.9392	0.9057	0.8772	0.8534	0.8332	0.8159	0.8010	0.7880
3	0.9669	0.8709	0.7977	0.7457	0.7071	0.6771	0.6530	0.6333	0.6167	0.6025
4	0.9065	0.7679	0.6841	0.6287	0.5895	0.5598	0.5365	0.5175	0.5017	0.4884
5	0.8412	0.6838	0.5981	0.5441	0.5065	0.4783	0.4564	0.4387	0.4241	0.4118
6	0.7808	0.6161	0.5321	0.4803	0.4447	0.4184	0.3930	0.3817	0.3682	0.3568
7	0.7271	0.5612	0.4800	0.4307	0.3974	0.3726	0.3535	0.3384	0.3259	0.3154
8	0.6798	0.5157	0.4377	0.3910	0.3595	0.3362	0.3185	0.3043	0.2926	0.2829
9	0.6385	0.4775	0.4027	0.3584	0.3286	0.3067	0.2901	0.2768	0.2659	0.2568
10	0.6020	0.4450	0.3733	0.3311	0.3029	0.2823	0.2666	0.2541	0.2439	0.2353
12	0.5410	0.3924	0.3264	0.2880	0.2624	0.2439	0.2299	0.2187	0.2098	0.2020
15	0.4709	0.3346	0.2758	0.2419	0.2195	0.2034	0.1911	0.1815	0.1736	0.1671
20	0.3894	0.2705	0.2205	0.1921	0.1735	0.1602	0.1501	0.1422	0.1357	0.1303
24	0.3434	0.2354	0.1907	0.1656	0.1493	0.1374	0.1286	0.1216	0.1160	0.1113
30	0.2929	0.1980	0.1593	0.1377	0.1237	0.1137	0.1061	0.1002	0.0958	0.0921
40	0.2370	0.1576	0.1259	0.1082	0.0968	0.0887	0.0827	0.0780	0.0745	0.0713
60	0.1737	0.1131	0.0895	0.0765	0.0682	0.0623	0.0583	0.0552	0.0520	0.0497
120	0.0998	0.0632	0.0495	0.0419	0.0371	0.0337	0.0312	0.0292	0.0279	0.0266
8	0	0	0	0	0	0	0	0	0	0

$\frac{\nu}{k}$	1	2	3	4	5	6	7	8	9	10
2	0.9999	0.9950	0.9794	0.9586	0.9373	0.9172	0.8988	0.8823	0.8674	0.8539
3	0.9933	0.9423	0.8831	0.8335	0.7933	0.7606	0.7335	0.7107	0.6912	0.6743
4	0.9676	0.8643	0.7814	0.7212	0.6761	0.6410	0.6129	0.5897	0.5702	0.5536
5	0.9279	0.7885	0.6957	0.6329	0.5875	0.5531	0.5259	0.5037	0.4854	0.4697
6	0.8828	0.7218	0.6258	0.5635	0.5195	0.4866	0.4608	0.4401	0.4229	0.4084
7	0.8376	0.6644	0.5685	0.5080	0.4659	0.4347	0.4105	0.3911	0.3751	0.3616
8	0.7945	0.6152	0.5209	0.4627	0.4226	0.3932	0.3704	0.3522	0.3373	0.3248
9	0.7544	0.5727	0.4810	0.4251	0.3870	0.3592	0.3378	0.3207	0.3067	0.2950
10	0.7175	0.5358	0.4469	0.3934	0.3572	0.3308	0.3106	0.2945	0.2813	0.2704
12	0.6528	0.4751	0.3919	0.3428	0.3099	0.2861	0.2680	0.2535	0.2419	0.2320
15	0.5747	0.4069	0.3317	0.2882	0.2593	0.2386	0.2228	0.2104	0.2002	0.1918
20	0.4799	0.3297	0.2654	0.2288	0.2048	0.1877	0.1748	0.1646	0.1567	0.1501
24	0.4247	0.2871	0.2295	0.1970	0.1759	0.1608	0.1495	0.1406	0.1338	0.1283
30	0.3632	0.2412	0.1913	0.1635	0.1454	0.1327	0.1232	0.1157	0.1100	0.1054
40	0.2940	0.1915	0.1508	0.1281	0.1135	0.1033	0.0957	0.0898	0.0853	0.0816
60	0.2151	0.1371	0.1069	0.0902	0.0796	0.0722	0.0668	0.0625	0.0594	0.0567
120	0.1225	0.0759	0.0585	0.0489	0.0429	0.0387	0.0357	0.0334	0.0316	0.0302
8	0	0	0	0	0	0	0	0	0	0

(Dixon, 1969)

ANEXO 2

Valores de t , segundo os graus de liberdade e o valor de α

Graus de liberdade	10%	α 5%	1%
1	6,31	12,71	63,66
2	2,92	4,30	9,92
3	2,35	3,18	5,84
4	2,13	2,78	4,60
5	2,02	2,57	4,03
6	1,94	2,45	3,71
7	1,90	2,36	3,50
8	1,86	2,31	3,36
9	1,83	2,26	3,25
10	1,81	2,23	3,17
11	1,80	2,20	3,11
12	1,78	2,18	3,06
13	1,77	2,16	3,01
14	1,76	2,14	2,98
15	1,75	2,13	2,95
16	1,75	2,12	2,92
17	1,74	2,11	2,90
18	1,73	2,10	2,88
19	1,73	2,09	2,86
20	1,73	2,09	2,84
21	1,72	2,08	2,83
22	1,72	2,07	2,82
23	1,71	2,07	2,81
24	1,71	2,06	2,80
25	1,71	2,06	2,79
26	1,71	2,06	2,78
27	1,70	2,05	2,77
28	1,70	2,05	2,76
29	1,70	2,04	2,76
30	1,70	2,04	2,75
40	1,68	2,02	2,70
60	1,67	2,00	2,66
120	1,66	1,98	2,62
∞	1,64	1,96	2,58

(DIXON, 1969)

ANEXO 3

Valores de F para $\alpha = 5\%$, segundo o número de graus de liberdade do numerador e do denominador

Nº de g. 1. do de-nomi-nador	Número de graus de liberdade do numerador								
	1	2	3	4	5	6	7	8	9
1	161	200	216	225	230	234	237	239	241
2	18,5	19,0	19,2	19,2	19,3	19,3	19,4	19,4	19,4
3	10,1	9,55	9,28	9,12	9,01	8,94	8,89	8,85	8,81
4	7,71	6,94	6,59	6,39	6,26	6,16	6,09	6,04	6,00
5	6,61	5,79	5,41	5,19	5,05	4,95	4,88	4,82	4,77
6	5,99	5,14	4,76	4,53	4,39	4,28	4,21	4,15	4,10
7	5,59	4,74	4,35	4,12	3,97	3,87	3,79	3,73	3,68
8	5,32	4,46	4,07	3,84	3,69	3,58	3,50	3,44	3,39
9	5,12	4,26	3,86	3,63	3,48	3,37	3,29	3,23	3,18
10	4,96	4,10	3,71	3,48	3,33	3,22	3,14	3,07	3,02
11	4,84	3,98	3,59	3,36	3,20	3,09	3,01	2,95	2,90
12	4,75	3,89	3,49	3,26	3,11	3,00	2,91	2,85	2,80
13	4,67	3,81	3,41	3,18	3,03	2,92	2,83	2,77	2,71
14	4,60	3,74	3,34	3,11	2,96	2,85	2,76	2,70	2,65
15	4,54	3,68	3,29	3,06	2,90	2,79	2,71	2,64	2,59
16	4,49	3,63	3,24	3,01	2,85	2,74	2,66	2,59	2,54
17	4,45	3,59	3,20	2,96	2,81	2,70	2,61	2,55	2,49
18	4,41	3,55	3,16	2,93	2,77	2,66	2,58	2,51	2,46
19	4,38	3,52	3,13	2,90	2,74	2,63	2,54	2,48	2,42
20	4,35	3,49	3,10	2,87	2,71	2,60	2,51	2,45	2,39
21	4,32	3,47	3,07	2,84	2,68	2,57	2,49	2,42	2,37
22	4,30	3,44	3,05	2,82	2,66	2,55	2,46	2,40	2,34
23	4,28	3,42	3,03	2,80	2,64	2,53	2,44	2,37	2,32
24	4,26	3,40	3,01	2,78	2,62	2,51	2,42	2,36	2,30
25	4,24	3,39	2,99	2,76	2,60	2,49	2,40	2,34	2,28
26	4,23	3,37	2,98	2,74	2,59	2,47	2,39	2,32	2,27
27	4,21	3,35	2,96	2,73	2,57	2,46	2,37	2,31	2,25
28	4,20	3,34	2,95	2,71	2,56	2,45	2,36	2,29	2,24
29	4,18	3,33	2,93	2,70	2,55	2,43	2,35	2,28	2,22
30	4,17	3,32	2,92	2,69	2,53	2,42	2,33	2,27	2,21
40	4,08	3,23	2,84	2,61	2,45	2,34	2,25	2,18	2,12
60	4,00	3,15	2,76	2,53	2,37	2,25	2,17	2,10	2,04
120	3,92	3,07	2,68	2,45	2,29	2,17	2,09	2,02	1,96
8	3,84	3,00	2,60	2,37	2,21	2,10	2,01	1,94	1,88

(DIXON, 1969)