

CQC - INDICADORES DE DESEMPENHO CIENTÍFICO - 2021

LIVROS E CAPÍTULOS DE LIVROS PUBLICADOS OU EDITADOS

1. Ildiz, G. O., Bayari, S., Yorguner, N., Fausto, R., *Blood Serum Infrared Spectra Based Chemometric Models for Auxiliary Diagnosis of Autism Spectrum Disorder*, in *Neural Engineer Techniques for Autism Spectrum Disorder*, El-Baz, A. S., Mahmoud, A., Eds., Volume 1: Imaging and Signal Analysis, Elsevier, Amsterdam (Holland), Cap. 10, pp 185-213.
ISBN: 9780128228227.
2. Nunes, C. M., Reva, I., Fausto, R., *Direct Observation of Tunneling Reactions by Matrix Isolation Spectroscopy* In *Tunnelling in Molecules: Nuclear Quantum Effects from Bio to Physical Chemistry*; Kästner, J. and Kozuch, S. Eds.; Royal Society of Chemistry, Cambridge (UK), Cap. 1, pp 1–60.
eISBN: 978-1-83916-037-0.
3. Fausto, R., Nikitin, T., Brás, E. M., *Light Induced Reactions in Cryogenic Matrices*, in *Photochemistry: A Specialist Periodic Report*, RSC Publishing, London (UK), vol. 49, pp 53-108.
ISBN: 978-1-83916-388-3
4. *Molecules* (Special Issue on “Molecular Spectroscopy and Molecular Structure: Commemorative Issue in Honor of Professor Austin J. Barnes on Occasion of his 75th Birthday”), Eds. Fausto, R., Turrell, S., Ildiz, G. O., MDPI, Basel (Switzerland), 2021.
https://www.mdpi.com/journal/molecules/special_issues/moleclar_struc
5. *Molecules* (Special Issue on "Exclusive Papers from Editorial Board Members of the Photochemistry Section of Molecules"), Eds. Fausto, R., Reed, S., MDPI, Basel (Switzerland), 2021.
https://www.mdpi.com/journal/molecules/special_issues/photo_EBs
6. *J. Mol. Struct.* (Special Issue on “Molecular Structure and Analytical and Bioanalytical Research: A Collection of Selected Contributions Presented at the International Conference on Analytical and Bioanalytical Methods – San Francisco 2020”), Eds. Fausto, R., Muller, G., Perretti, G., Ildiz, G. O., Elsevier, Amsterdam (Holland), 2021.
<https://www.sciencedirect.com/journal/journal-of-molecular-structure/special-issue/104WCZX6P4K>
7. *J. Mol. Struct.* (Special Issue on “Bridging Molecules and Nanoparticles - The Way from Optical Spectroscopy to Cancer Therapy”), Eds. Fausto, R., Chis, V., de la Chapelle, M. L., Focsan, M., Elsevier, Amsterdam (Holland), 2021.
<https://www.sciencedirect.com/journal/journal-of-molecular-structure/special-issue/10B4SZWTMCS>
8. *J. Mol. Struct.* (Special Issue on “Molecular Structural Aspects of Corrosion Inhibitors for Metal Protection”), Eds. Fausto, R., El Ibrahimy, B., Bazzi, L., Ouraishi, M. A., Alsaadi, A., Ildiz, G. O., Elsevier, Amsterdam (Holland), 2021.
<https://www.sciencedirect.com/journal/journal-of-molecular-structure/special-issue/10CW9LHXFB0>

9. J. Mol. Struct. (Special Issue on “Chemistry in a Confined Space: A Collection of Selected Communications Presented at the European Meeting on Physical Organic Chemistry, Wrocław-Karpacz, Poland”), Eds. Fausto, R., Orzechowski, K., Elsevier, Amsterdam (Holland), 2021.
<https://www.sciencedirect.com/journal/journal-of-molecular-structure/special-issue/10KH2PDJ671>
10. J. Mol. Struct. (Special Issue on “From Structure of Complexes to Structural Aspects of Catalysis - in Honor of István Pálinkó”), Eds. Tarczay, G., Sipós, P., Fausto, R., Elsevier, Amsterdam (Holland), 2021.
<https://www.sciencedirect.com/journal/journal-of-molecular-structure/special-issue/10F133WR6JP>
11. J. Mol. Struct. (Special Issue on “Nanoarchitectonics: From Molecules to Advanced Nanomaterials”), Eds. Pal, K., Thomas, S., Fausto, R., Elsevier, Amsterdam (Holland), 2021.
<https://www.sciencedirect.com/journal/journal-of-molecular-structure/special-issue/10WFCOXPRG6>
12. J. Mol. Struct. (Special Issue on “Materials Science and Nanotechnology 2019”), Eds. Ekicibil, A., Çağlar, Y., Canbay, C. A., Fausto, R., Elsevier, Amsterdam (Holland), 2021. (Cover by Fausto, R.)
<https://www.sciencedirect.com/journal/journal-of-molecular-structure/special-issue/10QXFP9HB27>
13. Results in Chemistry (Special Issue on “Results in Molecular spectroscopy”), Eds. Fausto, R., Reid, S., Elsevier, Amsterdam (Holland), 2021.
<https://www.journals.elsevier.com/results-in-chemistry/call-for-papers/results-in-molecular-spectroscopy>
14. J. Mol. Struct. (Special Issue on “Vibrational Spectroscopy in Materials Research - A Special Issue in Honor of Professor Mirosław Handke”), Eds. Krol, M., Abramczyk, H., Fausto, R., Elsevier, Amsterdam (Holland), 2021.
<https://www.sciencedirect.com/journal/journal-of-molecular-structure/special-issue/10G2Z1JWSL0>
15. Photochem (Special Issue on “Theme Issue in Honor of Prof. Maciej J. Nowak, for His Contributions to the Field of Photochemistry of Matrix-Isolated Species”), Eds. Kólos, R., Fausto, R., MDPI, Basel (Switzerland), 2021.
https://www.mdpi.com/journal/photochem/special_issues/Matrix_Isolated
16. Frontiers in Materials (Special Issue on “Application of Sustainable Materials for Anti-Corrosion and Anti-Scaling Purposes”), Eds. El Ibrahimy, B., Fausto, R., Guo, L., Ildiz, G. O., Kaya, S., Springer, New York (USA), 2021.
<https://www.frontiersin.org/research-topics/24426/application-of-sustainable-materials-for-anti-corrosion-and-anti-scaling-purposes>
17. Photochem (Special Issue on “Photochemistry of Organic Molecules and of Matrix-Isolated Reactive Intermediates: Themed Issue Honoring Professor Rui Fausto for His Contributions to the Field”), Eds. Ildiz, G. O., Justino, L. L. G., MDPI, Basel (Switzerland), 2021.
https://www.mdpi.com/journal/photochem/special_issues/Rui_Fausto

18. Eusébio, M. E. S., Castro, R. A. E., Canotilho, J., *Drug Nanocrystals*, em *Nanoparticles for Brain Drug Delivery* (Eds. Vitorino, C., Jorge, A., Pais, A., Jenny Stanford Publishing, Singapore, Cap. 7, pp. 211-255, 2021.
ISBN 978-981-4877-31-2
19. Arnaut, L. G., "*Chemical Kinetics*", 2nd Ed. Elsevier, Amsterdão (Holanda), pp. 1-600, 2021.
DOI: 10.1016/C2016-0-04391-7
ISBN: 9780444640390
20. Pereira, M. M., Carrilho, R. M. B., Calvete, M. J. F., *Tervalent Phosphorus Acid Derivatives*, in *Organophosphorus Chemistry Volume 50-Specialist Periodical Reports Series*, Allen, D. W., Loakes D., Tebby, J. C. Eds., Royal Society of Chemistry Books, Cambridge, Chap 2, pp 115-149, 2021.
DOI: 10.1039/9781839163814-00115
ISBN: 978-1-83916-205-3
21. Santos, A. L., Rola, Ana I. S., Morais, C., Vasconcelos, C., Gomes, E. M. C., Rodrigues, I. T., Azevedo, J., Rodrigues, S. P. J., (Eds.) *História da Ciência no Ensino. Revisitando Abordagens, Inovando Saberes*. Imprensa da Universidade de Coimbra. 2021.
ISBN: 978-989-26-1779-4
DOI: 10.14195/978-989-26-1780-0
22. Rodrigues, S. P. J., Tratamentos com medicamentos ou terapias não-farmacológicas? O que sabemos e o que não sabemos (na visão de um químico). In *História Interdisciplinar da Loucura, Psiquiatria e Saúde Mental XI*, pp. 347-356. Coimbra, Portugal: Sociedade de História Interdisciplinar da Saúde -SHIS, 2021.
ISBN: 978-989-54537-7-1
23. Caridade, P. J. S. B., Serpa, C., Rodrigues, S. P. J., "Kinetics and Modeling of Molecular Reactions", (Eds.), Special Issue of Applied Sciences (2021). ISSN 2076-3417.
24. Pinto, C., Seixas de Melo, J. S., *História da Ciência no Ensino. Revisitando Abordagens, Inovando Saberes*, Imprensa da Universidade de Coimbra, Capítulo 5, pp.73-99, 2021.
ISBN: 978-989-26-1780-0.
25. Seixas de Melo, J. S., *The molecules of colour. The real blue indigo: photostability mechanisms, new functional derivatives, and hybrids*, J. Photochemistry, 2021.
ISSN: 1465-1947
26. Barros, M. C. F., Ribeiro, A. C. F., Santos, C. I. A. V., *Thermodiffusion on the Fontainebleau Benchmark Mixture: An Overview* ", in *Optical and Molecular Physics- Theroretical Principles and Experimental Methods*, M. A. Estesó, A. C. F. Ribeiro, A.K. Haghi (Eds.), Apple Academic Press, Inc./CRC, New Jersey, Chapter 15, 2021.
ISBN-9781003150053
27. Consul, R., Lucas F., Campos, M. G., *Ayahuasca: Inherent Dangers in Its Consumption*. In "*Wild Plants: The Treasure of Natural Healers*" (Eds: Mahendra Rai and Shandesh Bhattarai), Ed.by CRC press USA. Chapter 16, pp 401-424, 2021. Ed. Taylor & Francis Group
DOI: 10.1201/9781003020134; eBook ISBN 9781003020134

28. Campos, M. G., Barreto, L. M. R. C., Nordi, J. C., Chica, M., Campoy, P., Nozkova, J., Almaraz-Abarca, N., Živoslav, Tešić, Lj., Mosić, M. D., Kostić, A. Z., Pešić, M. B., Milojković-Opsenica, D. M., Sickel, W., Ankenbrand, M. J., Grimmer, G., Steffan-Dewenter, I., Keller, A., Förster, F., Ch, T., Liolios, V., Kanelis, D., Rodopoulou, M., Thrasyvoulou, A., Paulo, L., Lucchetti, M. A., Kast, C., Glauser, G., Pascoal, A., Tolentino, G. S., Estevinho, L. M., Muradian-Bicudo, L., Carreck, N.. *Standard methods for Bee pollen research*. In V Dietemann; J D Ellis; P Neumann (Eds) The COLOSS BEEBOOK, Volume III: Standard methods for Apis mellifera bee products research. Journal of Apicultural Research: SPECIAL ISSUE Journal of Apicultural Research, 60:4, pp 1-109, 2021. www.coloss.org/beebook, VOL III, 2021 (in press). DOI: 10.1080/00218839.2021.1948240
29. Utzeri, G., Verissimo, L. M. P., Ribeiro, A. C. F., Valente, A. J. M., *Pesticides and their environment and health impact: An approach on remediation using hydrogels*, in *Theoretical and empirical analysis in physical chemistry: A framework for research*, M.A. Estes, A.C.F. Ribeiro, A.K. Haghi (Eds.), Apple Academic Press, Inc./CRC, New Jersey, Chapter 7, 2021. ISBN: 978-1-77188-856-1
30. Ribeiro, A. C. F., Verissimo, L. M. P., Valente, A. J. M., Andrade, S. C. G. S., Cabral, A. M. T. D. P. V., Estes, M. A. *Theoretical Values of Diffusion Coefficients of Electrolytes in Aqueous Solutions: Important Parameters with Application in Fundamental and Technological Areas*, in *Optical and Molecular Physics- Theroretical Principles and Experimental Methods*, M.A. Estes, A.C.F. Ribeiro, A.K. Haghi (Eds.), Apple Academic Press, Inc./CRC, New Jersey, Chapter 16, 2021. ISBN: 9781003150053
31. Ribeiro, A. C. F., Verissimo, L. M. P., Valente, A. J. M., Cabral, A. M. T. D. P. V., Estes, M. A., *“Hydrodynamic Radii for Sodium Salts in Aqueous Solutions: Contribution from Electrical Conductance and Diffusion”* in *Optical and Molecular Physics Theoretical Principles and Experimental Methods*, M. A. Estes, A. C. F. Ribeiro, A.K. Haghi (Eds.), Apple Academic Press, Inc./CRC, New Jersey, Chapter 17, 2021. ISBN-9781003150053
32. Cova, T. F. G. G., Murtinho, D., Garcia, R., Pais, A. A. C. C., Valente, A. J. M., *Cyclodextrin-based polymers for pollutant removal*, in: *Applications of biodegradable and biobased polymers for human health and a cleaner environment*, I. Stoica, O. Mukbaniani, N.K. Rawat, A.K. Haghi (Editors). Apple Academic Press, New York, 2021. Chapter 14. DOI: 10.1201/9781003146360-17 ISBN 978-1-77188-976-6.
33. Vilsinski, B. H., Gonçalves, R. S., Caetano, W., Souza, P. R., Oliveira, A. C., Gomes, Y. S., Gerola, A. P., Martins, A. F., Valente, A. J. M., Muniz, E. C., *Photodynamic Therapy: Use of Nanocarrier Systems to Improve Its Effectiveness*, in: *Functional Properties of Advanced Engineering Materials and Biomolecules. Engineering Materials*. F.A. La Porta, C.A. Taft (eds). Springer, Cham, 2021. DOI:10.1007/978-3-030-62226-8_10
34. Palito, C., Encarnação, T., Singh, P., Valente, A. J. M., Pais, A. A. C. C., *Microalgae immobilization and use in bioremediation*, in: *Marine Microbial Bioremediation*. A. K. Vala, D. R. Dudhagara, B. P. Dave (Eds.). CRC Press, Boca Raton, 2021. DOI: 10.1201/9781003001072

35. Fangaia, S. I. G., Nicolau, P. M. G., Guerra, F. A. D. R. A., Lobo, V. M. M., Ribeiro, A. C. F., *Effect of Light on Transport of Potassium Thiocyanate in Aqueous Solutions: Part I* in *Applied Pharmaceutical Practice and Nutraceuticals Natural Product Development*, Mahapatra, D. K., Aguilar, C. N., Hagui, A. K., (Eds.), Apple Academic Press, Inc./CRC, New Jersey, Chapter 12, 2021.
ISBN: 9781003054894
36. Estes, M. A., Ribeiro, A. C. F., Haghi, A. K., Eds., *Theoretical and Empirical Analysis in Physical Chemistry: A Framework for Research*, Innovations in Physical Chemistry Series, Apple Academic Press Inc., Florida, USA, 2021.
ISBN: 978-1-77188-856-1
37. Estes, M. A., Ribeiro, A. C. F., Haghi, A. K., Eds., *Chemistry and Chemical Engineering for Sustainable Development: Best Practices and Research Directions*, Innovations in Physical Chemistry Series, Apple Academic Press Inc., Burlington, Canada, 2021.
ISBN: 978-1-77188-870-7
38. Vitorino, C., Jorge, A., Pais, A., *Recent Trends in Nanotechnology for Brain Delivery: A Brief Outlook in Nanoparticles for Brain Drug Delivery*, Jenny Stanford Publishing, Chapter I, pp. 3-7, 2021
ISBN: 9781003119326
39. Basso, J., Mendes, M., Ferreira, M., Sousa, J., Pais, A., Vitorino, C., *Recent in vitro Models for the Blood-Brain Barrier in Nanoparticles for Brain Drug Delivery*, Jenny Stanford Publishing, pp. 383-405, 2021
ISBN: 9781003119326
40. Jorge, A. F., Grijalvo, S., Pais, A., Eritja, R., *Lipid Nanocarriers for Oligonucleotide Delivery to the Brain in Nanoparticles for Brain Drug Delivery*, Jenny Stanford Publishing, pp. 257-287, 2021
ISBN: 9781003119326
41. Vitorino, C., Jorge, A., Pais, A., *Nanoparticles for Brain Drug Delivery*. Pan Stanford Publishing and CRC Press (Taylor & Francis), Singapore. Nanoparticles for Brain Drug Delivery
1st Edition, New York, 2021
ISBN: 9789814877312
42. Ferreira, M., Cova, T., Paixão, J., Pais, A., Vitorino, C., *Coprecipitation synthesis, stabilization and characterization of oleic acid-coated iron oxide nanoparticles, for magnetically oriented hybrid system vectorization*, in *Magnetic Nanoparticle-Based Hybrid Materials*, Chap.11, A. Ehrmann, et al., Editors, Woodhead Publishing. pp. 273-301, 2021
ISBN: 9780128236895
43. Vitorino, C., Lopes, C. M., Lúcio, M., *Nanomedicine and drug delivery approaches*. In *Organelle and Molecular Targeting*, Chapter II: CRC Press, Taylor & Francis Group, Singapore. 2021
ISBN: 1003092772, 9781003092773
44. Gerales, C. F. G. C., Delville, M.- H. *Iron Oxide Nanoparticles for Bio-Imaging*, em *Metal Ions in Bio-Imaging Techniques* (Eds. Sigel, A., Freisinger, E., Sigel, R K. O), Walter de Gruyter GmbH, Berlim (Alemanha), Vol. 22, Capítulo 9, pp. 271-297, 2021.
Print ISBN: 978-3-110-68556-5. Ebook ISBN: 978-3-110-68570-1

45. Orvalho, T., Vaz, D. C., Ribeiro, V., Campos, M. J., *Storage Procedures Influence the Antioxidant Capacity of Bee Pollen*. In: da Costa Sanches Galvão J.R. et al. (eds). ICoWEFS 2021. Springer, Cham., 2021.

DOI: 10.1007/978-3-030-75315-3_23

Print ISBN: 978-3-030-75314-6

Online ISBN: 978-3-030-75315-3

46. Parracho, T., Vaz, D. C., Veríssimo, P., Ribeiro, V., *Sand-Dune Plants from the Atlantic Coast of the Iberian Peninsula: Features and Applications*. In: da Costa Sanches Galvão J.R. et al. (eds) ICoWEFS 2021. Springer, Cham., 2021.

DOI: 10.1007/978-3-030-75315-3_15

Print ISBN: 978-3-030-75314-6

Online ISBN: 978-3-030-75315-3

47. Preto, A. J., Marques-Pereira, C., Baptista, S. J., Bueschbell, B., Barreto, C. A. V., Gaspar, A. T., Pinheiro, I., Pereira, N., Pires, M., Ramalhão, D., Silvério, D., Rosário-Ferreira, N., Melo, R., Mourão, J., Moreira, I. S., *Targeting GPCRs via Multi-platforms arrays and AI*, in *Reference Module in Biomedical Sciences*. Elsevier, 2021.

DOI: 10.1016/B978-0-12-820472-6.00048-7

ISBN: 978-0-12-801238-3

48. Rosário-Ferreira, N., Marques-Pereira, C., Gouveia, R. P., Mourão, J., Moreira, I. S., *Guardians of the cell: State-of-the-art of membrane proteins from a computational point-of-view*, in *Computational Design of Membrane Proteins*, Methods in Molecular Biology, Moreira, I. S., Machuqueiro, M., and Mourão, J., Ed., Vol 2315, Humana, New York, NY, pp. 3-28, 2021.

DOI: 10.1007/978-1-0716-1468-6_1

ISBN: 978-1-0716-1468-6

ARTIGOS PUBLICADOS EM REVISTAS CIENTÍFICAS INTERNACIONAIS COM REVISÃO POR PARES

1. Viegas, L. P., Nunes, C. M., Fausto, R., *Spin-Forbidden Heavy-Atom Tunneling in the Ring-Closure of Triplet Cyclopentane-1,3-diyl*, *Phys. Chem. Chem. Phys.*, 23, pp 5797-5803, 2021. "HOT Article", in the thematic collection "2021 PCCP HOT Articles".

DOI: 10.1039/D1CP00076D

2. Sıdır, İ., Góbi, S., Sıdır, Y. G., Fausto, R., *Infrared Spectrum and UV-Induced Photochemistry of Matrix-Isolated Phenyl 1-Hydroxy-2-Naphthoate*, *Photochem*, 1 pp 10-25, 2021.

DOI: 10.3390/photochem1010002

3. Nogueira, B. A., Milani, A., Castiglioni, C., Fausto, R., *The Correlation between Experimental Polarized Raman Spectra and Their DFT Prediction in the LCAO Framework: the R3c LiNbO₃ Crystal as a Test Case*, *J. Raman Spectrosc.*, 52, pp 995-1010, 2021.

DOI: 10.1002/jrs.6091