

Сведения, характеризующие научную ценность научных трудов, представленных для премии, присуждаемой Санкт-Петербургский государственным университетом за научные труды, в категории за вклад в науку молодых ученых.

Название цикла работ: «Реакционно-массообменные процессы и совмещенные равновесия в системах, образованных компонентами биотоплива: термодинамическое исследование и топология фазовых диаграмм»

1. S.P. Verevkin, S.P. Safronov, A.A. Samarov, S. V Vostrikov, Hydrogen Storage: Thermodynamic Analysis of Alkyl-Quinolines and Alkyl-Pyridines as Potential Liquid Organic Hydrogen Carriers (LOHC), Applied Sciences (Switzerland) 11 (2021) 11758.
DOI: 10.3390/app112411758
Количество цитирований: 0 (Scopus)
Impact factor (2020): 2.679. Impact factor (5 лет): **2.736**.
SJR: **0.507**. SNIP: **1.026**.
SJR: (Q2)
Pure ID: 96264528
2. Trofimova M., Misikov G., Samarov A., Prikhodko I., Toikka M. Solubility in the system acetic acid – n-amyl alcohol – n-amyl acetate – water at 293.15 K, 303.15 K, 313.15 K and 323.15 K and atmospheric pressure// Journal of Chemical Thermodynamics. 2021. V. 161. Article 106515.
DOI: 10.1016/j.jct.2021.106515
Количество цитирований: 3 (Scopus)
Impact factor (2020): **3.178**. Impact factor (5 лет): **2.712**.
SJR: **0.665**. SNIP: **1.091**.
SJR: (Q2)
Pure ID: 77932321
3. M. Toikka, A. Smirnov, A. Samarov, Liquid-liquid equilibrium, solubility, and critical states in an acetic acid-n-butyl alcohol-n-butyl acetate-water system at 328.15 k and 101.3 kpa: Topology of phase diagrams and nrtl modeling, Journal of Chemical & Engineering Data 66 (2021) 1466–1474. Q1
DOI: 10.1021/acs.jced.0c01066
Количество цитирований: 5 (Scopus)
Impact factor (2020): **2.694**. Impact factor (5 лет): **2.570**.
SJR: **0.691**. SNIP: **0.880**.
SJR: (Q1)
Pure ID: 88744696
4. A.A. Samarov, S.P. Verevkin, Strength of Intramolecular Hydrogen Bonding in 2-Biphenylmethanol and 4-Biphenylmethanol, Russian Journal of General Chemistry. 91 (2021) 1946–1956.
DOI: 10.1134/S1070363221100042

Количество цитирований: 0 (Scopus)

Impact factor (2020): **0.868**. Impact factor (5 лет): **0.731**.

SJR: **0.191**. SNIP: **0.376**.

SJR: (Q3)

Pure ID: 88804852

5. A.A. Samarov, M.A. Toikka, A.M. Toikka, Phase Equilibria in Alcohol-Ester Systems with Deep Eutectic Solvents Based on Choline Chloride at 293.15 and 313.15 K, *Theoretical Foundations of Chemical Engineering*. 55 (2021) 290–300.

DOI: 10.1134/S004057952102010X

Количество цитирований: 0 (Scopus)

Impact factor (2020): **0.698**. Impact factor (5 лет): **0.708**.

SJR: **0.299**. SNIP: **0.607**.

SJR: (Q3)

Pure ID: 87678481

6. Alina Senina, Vladimir Margin, Alexandra Golikova, Nikita Tsvetov, Anna Sadaeva, Maria Toikka. Physico-chemical study of systems involving ethanol, promising for use as a biofuel // *Fuel*, Vol. 284., 119099, 15 January 2021, doi: 10.1016/j.fuel.2020.119099

Количество цитирований: 0 (Scopus)

Impact factor (2020): **6.609**. Impact factor (5 лет): **6.931**

SJR: **1.514**. SNIP: **1.906**.

SJR: (Q1)

Pure ID: 62724951

7. Toikka, M., Podryadova, K., Kudryashova, A. Liquid-liquid equilibria, solubility and critical states in the system propionic acid – 1-propanol – n-propyl propionate – water at 303.15 K// *Journal of Chemical Thermodynamics*. 2021. V. 152. Article 106515.

DOI: 10.1016/j.jct.2020.106265

Количество цитирований: 2 (Scopus)

Impact factor (2020): **3.178**. Impact factor (5 лет): **2.712**.

SJR: **0.665**. SNIP: **1.091**.

SJR: (Q2)

Pure ID: 62725145

8. Tsvetov, N., Sadaeva, A., Toikka, M., Zvereva, I., Toikka, A. Excess molar heat capacity for the binary system n-propyl alcohol + water in the temperature range 278.15–358.15 K: new data and application for excess enthalpy calculation// *Journal of Thermal Analysis and Calorimetry*, 2020, Vol. 145, I. 5, P. 1977-1987.

DOI: 10.1007/s10973-020-09605-y

Количество цитирований: 2 (Scopus)

Impact factor (2020): **4.626**. Impact factor (5 лет): **3.734**.

SJR: **0.639**. SNIP: **1.214**.

SJR: (Q2)

Pure ID: 62725313

9. Maria Toikka, Alexey Sadaev, Olga Lobacheva, and Alexandra Golikova. Experimental Liquid–Liquid Equilibrium and Solubility Study of an Acetic Acid–n-Propyl Alcohol–n-Propyl Acetate–Water System at 323.15 and 333.15 K// Journal of Chemical & Engineering Data 2020, Vol 65, I. 11, P. 5352-5359, DOI: 10.1021/acs.jced.0c00501

Количество цитирований: 4 (Scopus)

Impact factor (2020): **2.694**. Impact factor (5 лет): **2.570**.

SJR: **0.691**. SNIP: **0.880**.

SJR: (Q1)

Pure ID: 86654505

10. Samarov A, Trofimova M., Toikka M., Toikka A. Experimental Data on Chemical Equilibrium in the System with Ethyl Formate Synthesis Reaction at 298.15 K, Journal of Chemical & Engineering Data. 2020. V. 65. P. 2578-2582. DOI: 10.1021/acs.jced.9b01205

Количество цитирований: 2 (Scopus)

Impact factor (2020): **2.694**. Impact factor (5 лет): **2.570**.

SJR: **0.691**. SNIP: **0.880**.

SJR: (Q1)

Pure ID: 62725490

11. Maria Toikka, Alexey Sadaev, Artemiy Samarov. Liquid-liquid equilibria, solubility and critical states in the system propionic acid – n-butanol – n-butyl propionate – water at 293.15 K and atmospheric pressure, Journal of Chemical Thermodynamics, V. 141. Article 105957. 2020.

DOI: 10.1016/j.jct.2019.105957

Количество цитирований: 5 (Scopus)

Impact factor (2020): **3.178**. Impact factor (5 лет): **2.712**.

SJR: **0.665**. SNIP: **1.091**.

SJR: (Q2)

Pure ID: 49067967

12. Maya Trofimova, Alexey Sadaev, Artemiy Samarov, Alexandra Golikova, Nikita Tsvetov, Maria Toikka, Alexander Toikka. Liquid-liquid equilibrium of acetic acid – ethanol – ethyl acetate – water quaternary system: Data review and new results at 323.15 K and 333.15 K, Fluid Phase Equilibria. Vol. 503, Article 112321, 2020.

DOI: 10.1016/j.fluid.2019.112321

Количество цитирований: 11 (Scopus)

Impact factor (2020): **2.775**. Impact factor (5 лет): **2.748**.

SJR: **0.606**. SNIP: **0.932**.

SJR: (Q2)

Pure ID: 47834262

13. Alexandra Golikova, Nikita Tsvetov, Artemiy Samarov, Maria Toikka, Irina

Zvereva, Maya Trofimova, Alexander Toikka. Excess enthalpies and heat of esterification reaction in ethanol + acetic acid + ethyl acetate + water system at 313.15 K, Journal of Thermal Analysis and Calorimetry, Vol. 139, I. 2, P. 1301-1307, 2020.

DOI: 10.1007/s10973-019-08488-y

Количество цитирований: 2 (Scopus)

Impact factor (2020): **4.626**. Impact factor (5 лет): **3.734**.

SJR: **0.639**. SNIP: **1.214**.

SJR: (Q2)

Pure ID: 45870863

14. М.А. Тойкка, А.А. Самаров, А.А. Садаева, А.А. Сенина, О.Л. Лобачева. Химическое равновесие в системе пропионовая кислота – этиловый спирт – этилпропионат – вода и экстракционные процессы с участием глубоких эвтектических растворителей, Тонкие химические технологии. Том 14, № 1. 2019. С. 47-58.

DOI: 10.32362/2410-6593-2019-14-1-47-58

Impact factor РИНЦ (2020): **0.713**

Pure ID: 78564405

15. Alexander Smirnov, Anna Sadaeva, Kristina Podryadova, Maria Toikka. Quaternary liquid-liquid equilibrium, solubility and critical states: Acetic acid - n-butanol - n-butyl acetate - water at 318.15 K and atmospheric pressure, Fluid Phase Equilibria. Vol. 493, P. 102-108, 2019.

DOI: 10.1016/j.fluid.2019.04.020

Количество цитирований: 11 (Scopus)

Impact factor (2020): **2.775**. Impact factor (5 лет): **2.748**.

SJR: **0.606**. SNIP: **0.932**.

SJR: (Q2)

Pure ID: 41191992

16. Toikka M., Sadaeva A., Samarov A., Toikka A. Solubility and critical surface in the system propionic acid–ethanol–ethyl propionate–water at 293.15, 303.15 and 313.15 K, Journal of Chemical Thermodynamics. Vol. 132. P. 113-121. May 2019.

DOI: 10.1016/j.jct.2018.12.026

Количество цитирований: 13 (Scopus)

Impact factor (2020): **3.178**. Impact factor (5 лет): **2.712**.

SJR: **0.665**. SNIP: **1.091**.

SJR: (Q2)

Pure ID: 38491597

17. Maya Trofimova, Alexey Sadaev, Artemiy Samarov, Maria Toikka, Alexander Toikka. Solubility, liquid-liquid equilibrium and critical states for the quaternary system formic acid – ethanol – ethyl formate – water at 298.15 K and 308.15 K, Fluid Phase Equilibria. Vol. 485, P. 111-119. April 2019

DOI: 10.1016/j.fluid.2018.12.024

Количество цитирований: 11 (Scopus)
Impact factor (2020): **2.775**. Impact factor (5 лет): **2.748**.
SJR: 0.606. SNIP: **0.932**.
SJR: (Q2)
Pure ID: 37692699

18. Samarov, A., Shner, N., Mozheeva, E., Toikka, A. Liquid-liquid equilibrium of alcohol–ester systems with deep eutectic solvent on the base of choline chloride. *Journal of Chemical Thermodynamics*. Vol. 131, P. 369-374. 2019.
DOI: 10.1016/j.jct.2018.11.019
Количество цитирований: 16 (Scopus)
Impact factor (2020): **3.178**. Impact factor (5 лет): **2.712**.
SJR: 0.665. SNIP: **1.091**.
SJR: (Q2)
Pure ID: 38490964
19. Prikhod'ko, I.V., Samarov, A.A., Toikka, A.M. On Application of PC-SAFT Model for Estimating the Speed of Sound in Synthetic and Natural Oil-and-Gas Mixtures. *Russian Journal of Applied Chemistry*. Vol. 92(2), P. 262-266. 2019.
DOI: 10.1134/S1070427219020149
Количество цитирований: 2 (Scopus)
Impact factor(2020): **0.850**. Impact factor (5 лет): **0.806**.
SJR: 0.234. SNIP: **0.502**.
SJR: (Q3)
Pure ID: 35833745
20. Toikka, A.M., Samarov, A.A., Farzaneh-Gord, M., Zvereva, I.A. On Calculation of Some Properties of Natural Gas Using a Limited Number of Experimental Parameters. *Theoretical Foundations of Chemical Engineering*. Vol. 53(1) P. 21-28. 2019.
DOI: 10.1134/S0040579519010159
Количество цитирований: 0 (Scopus)
Impact factor (2020): **0.698**. Impact factor (5 лет): **0.708**.
SJR: 0.299. SNIP: **0.457**.
SJR: (Q3)
Pure ID: 49068153
21. Samarov A. A., Smirnov, M. A., Sokolova, M. P., Toikka A. M. Liquid-Liquid Equilibrium Data for the System N-Octane plus Toluene + DES at 293.15 and 313.15 K and Atmospheric Pressure, *Theoretical Foundations of Chemical Engineering*, Vol. 52, P. 258-263, 2018.
DOI: 10.1134/S0040579518020148
Количество цитирований: 13 (Scopus)
Impact factor(2020): **0.698**. Impact factor (5 лет): **0.777**.
SJR: 0.299. SNIP: **0.607**.
SJR: (Q3)

Pure ID: 9315843

22. Toikka M. A., Trofimova D. V., Samarov A. A. Liquid-liquid equilibrium and critical states for the quaternary system propionic acid-n-butanol-n-butyl propionate-water at 303.15 K, Fluid Phase Equilibria, Vol. 460, P. 17-22, 2018.
DOI: 10.1016/j.fluid.2017.12.023

Количество цитирований: 16 (Scopus)

Impact factor (2020): **2.775**. Impact factor (5 лет): **2.748**.

SJR: **0.606**. SNIP: **0.932**.

SJR: (Q2)

Pure ID: 11784668

23. Samarov A.A., Smirnov M.A., Toikka A.M., Prildiodko I.V. Study of Deep Eutectic Solvent on the Base Choline Chloride as Entrainer for the Separation Alcohol-Ester Systems, Journal of Chemical and Engineering Data, Vol. 63, P. 1877-1884, 2018.

DOI: 10.1021/acs.jced.7b00912

Количество цитирований: 12 (Scopus)

Impact factor (2020): **2.694**. Impact factor (5 лет): **2.570**.

SJR: **0.691**. SNIP: **0.880**.

SJR: (Q1)

Pure ID: 25803178

24. Toikka M.A., Vernadskaya V. A, Samarov A.A. Solubility, liquid-liquid equilibrium and critical states for quaternary system acetic acid - n-amyl alcohol - n-amyl acetate - water at 303.15 K and atmospheric pressure, Fluid Phase Equilibria, Vol. 471, P. 68-73, 2018.

DOI: 10.1016/j.fluid.2018.05.009

Количество цитирований: 12 (Scopus)

Impact factor (2020): **2.775**. Impact factor (5 лет): **2.748**.

SJR: **0.606**. SNIP: **0.932**.

SJR: (Q2)

Pure ID: 46154326

25. Alexandra Golikova, Nikita Tsvetov, Anufrikov Yuri, Maria Toikka, Zvereva Irina, Alexander Toikka. Excess enthalpies of the reactive system ethanol + acetic acid + ethyl acetate + water for chemically equilibrium states at 313.15 K, Journal of Thermal Analysis and Calorimetry, 2018, Vol. 134, I. 1, P. 835-841.

DOI: 10.1007/s10973-018-7010-8

Количество цитирований: 2 (Scopus)

Impact factor (2020): **4.626**. Impact factor (5 лет): **3.734**.

SJR: **0.639**. SNIP: **1.214**.

SJR: (Q2)

Pure ID: 33235180

26. Maria Toikka, Anna Sadaeva, Artemiy Samarov, Alexandra Golikova, Maya Trofimova, Nataliya Shcherbakova, Alexander Toikka. Chemical equilibrium for

the reactive system propionic acid + ethanol + ethyl propionate + water at 303.15 and 313.15 K, Fluid Phase Equilibria, 2017, Vol. 451, P. 91-95.

doi: 10.1016/j.fluid.2017.08.010

Количество цитирований: 8 (Scopus)

Impact factor (2020): **2.775**. Impact factor (5 лет): **2.748**.

SJR: **0.606**. SNIP: **0.932**.

SJR: (Q2)

Pure ID: 9151394

27. Alexandra Golikova, Artemiy Samarov, Maya Trofimova, Sevastyan Rabdano, Maria Toikka, Oleg Pervukhin, Alexander Toikka. Chemical Equilibrium for the Reacting System Acetic Acid–Ethanol–Ethyl Acetate–Water at 303.15 K, 313.15 K and 323.15 K, Journal of Solution Chemistry, 2017., Vol. 46, P. 374-387.

doi: 10.1007/s10953-017-0583-1

Количество цитирований: 10 (Scopus)

Impact factor (2020): **1.667**. Impact factor (5 лет): **1.498**.

SJR: **0.326**. SNIP: **0.698**.

SJR: (Q3)

Pure ID: 7736010

28. Samarov, A.A., Smirnov, M.A., Sokolova, M.P., Popova, E.N., Toikka, A.M. Choline chloride based deep eutectic solvents as extraction media for separation of n-hexane–ethanol mixture // Fluid Phase Equilibria. 2017. V. 448. P. 123-127. DOI 10.1016/j.fluid.2017.03.029

Количество цитирований: 34 (Scopus)

Impact factor (2020): **2.775**. Impact factor (5 лет): **2.748**.

SJR: **0.606**. SNIP: **0.932**.

SJR: (Q2)

Pure ID: 9151284

Работы, опубликованные в течение 10 лет, предшествующих году проведения конкурса (30% от общего количества работ, выдвигаемых на Конкурс)

29. Samarov A., Toikka M., Trofimova M., Toikka A. Liquid-liquid equilibrium for the quaternary system propionic acid + n-propanol + n-propyl propionate + water at 293.15, 313.15 and 333.15 K // Fluid Phase Equilibria. 2016. T. 425. C. 183-187.

DOI 10.1016/j.fluid.2016.05.033

Количество цитирований: **12** (Scopus)

Impact factor (2020): **6.926**. Impact factor (5 лет): **5.707**.

SJR: **0.962**. SNIP: **2.186**.

SJR: (Q1)

Pure ID: 7572688

30. Artemiy Samarov, Pavel Naumkin, Alexander Toikka. Chemical equilibrium for the reactive system acetic acid + n-butanol + n-butyl acetate + water at 308.15 K // Fluid Phase Equilibria, 2015 Vol. 403, P. 10-13
DOI: 10.1016/j.fluid.2015.06.001
Количество цитирований: **9** (Scopus)
Impact factor (2020): **2.775**. Impact factor (5 лет): **2.748**.
SJR: **0.606**. SNIP: **0.932**.
SJR: (Q2)
Pure ID: 3934722
31. A.M. Toikka, A.A. Samarov, M.A. Toikka. Phase and chemical equilibria in multicomponent fluid systems with a chemical reaction // Russian Chemical Reviews. 84 (4). 2015. pp. 378-392.
DOI: 10.1070/RCR4515
Количество цитирований: **18** (Scopus)
Impact factor (2020): **6.926**. Impact factor (5 лет): **5.707**.
SJR: **0.962**. SNIP: **2.186**.
SJR: (Q1)
Pure ID: 3932966
32. Artemiy Samarov, Maria Toikka, Alexander Toikka. Liquid–liquid equilibrium and critical states for the system acetic acid + n-butanol + n-butyl acetate + water at 308.15 K // Fluid Phase Equilibria. Volume 385, 2015, pp. 129–133.
DOI:10.1016/j.fluid.2014.11.004
Количество цитирований: **21** (Scopus)
Impact factor (2020): **2.775**. Impact factor (5 лет): **2.748**.
SJR: **0.606**. SNIP: **0.932**.
SJR: (Q2)
Pure ID: 3927058
33. Maria Toikka, Artemiy Samarov, Alexander Toikka. Solubility, liquid–liquid equilibrium and critical states for the system acetic acid + n-propanol + n-propyl acetate + water at 293.15 K and 303.15 K // Fluid Phase Equilibria, 2014. Vol. 375, P. 66-72.
DOI: 10.1016/j.fluid.2014.04.034
Количество цитирований: **24** (Scopus)
Impact factor (2020): **2.775**. Impact factor (5 лет): **2.748**.
SJR: **0.606**. SNIP: **0.932**.
SJR: (Q2)
SJR: (Q2)
Pure ID: 7004723
34. Maria Toikka, Artemiy Samarov, Maya Trofimova, Alexandra Golikova, Nikita Tsvetov, Alexander Toikka. Solubility, liquid–liquid equilibrium and critical states for the quaternary system acetic acid–ethanol–ethyl acetate–water at 303.15 K and 313.15 K, Fluid Phase Equilibria, 2014., Vol. 373, P. 72-79,
DOI: 10.1016/j.fluid.2014.04.013

Количество цитирований: **29** (Scopus)

Impact factor (2020): **2.775**. Impact factor (5 лет): **2.748**.

SJR: **0.606**. SNIP: **0.932**.

SJR: (Q2)

Pure ID: 7004701

35. Maria Toikka, Alexander Toikka. Peculiarities of phase diagrams of reactive liquid–liquid systems // Pure and Applied Chemistry, 2013. Vol. 85. № 1. P. 277-288.

DOI: 10.1351/PAC-CON-12-05-07

Количество цитирований: 6 (Scopus)

Impact factor (2020): **2.453**. Impact factor (5 лет): **1.82**.

SJR: **0.440**. SNIP: **0.759**.

SJR: (Q2)

Pure ID: 7374678

36. Maya Trofimova, Maria Toikka, Alexander Toikka. Solubility, liquid–liquid equilibrium and critical states for the quaternary system acetic acid–ethanol–ethyl acetate–water at 293.15 K // Fluid Phase Equilibria, 2012. Vol. 313, P. 46-51.

DOI: 10.1016/j.fluid.2011.09.035

Количество цитирований: 26 (Scopus)

Impact factor (2020): **2.775**. Impact factor (5 лет): **2.748**.

SJR: **0.606**. SNIP: **0.932**.

SJR: (Q2)

Pure ID: 5242918