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Active metal species assembled with heteropoly tungstate anion $PW_9O_{34}^{9-}$ for liquid phase hydrocarbon oxidation (Kuznetsova, L.I. (158) 429)

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Hydrocarbon conversion on ZSM-5 in the presence of N_2O : relative reactivity and routes of product formation studied by GC-MS and ^{13}C NMR (Vereshchagin, S.N. (158) 377)

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Effect of NO on D_2 adsorption on the Pt(100)–(hex) surface (Vovk, E.I. (158) 395)

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Non-linear processes on Pt, Rh, Pd, Ir and Ru surfaces during the NO-hydrogen reactions (Cobden, P.D. (158) 115)

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Active metal species assembled with heteropoly tungstate anion $PW_9O_{34}^{9-}$ for liquid phase hydrocarbon oxidation (Kuznetsova, L.I. (158) 429)

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Oscillations

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Oxidative coupling of methane

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Catalytic synthesis of carbon nanostructures from polymer precursors (Maksimova, N.I. (158) 301)

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The determination of adsorption site structures of high dispersed oxides by EXAFS spectroscopy using molecules as probe (Kriventsov, V.V. (158) 287)

Propylene polymerization

Ethylene and hydrogen effects in propylene polymerization with 2-arylindenyl zirconocenes (Lin, S. (158) 423)

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Molecular-level studies of transition metal-support interactions during the first steps of catalysts preparation: platinum speciation in the hexachloroplatinate/alumina system (Shelimov, B.N. (158) 91)

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Pyrimidines

An investigation of the effects of Cu^{2+} and heat treatment on TiO_2 photooxidation of certain pyrimidines (Dhananjeyan, M.R. (158) 577)

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Raman spectroscopy

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Structural transformations in overlayer and sticking probability during chemisorption: oxygen on (100) surface of metals (Salanov, A.N. (158) 367)

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Structural sensitivity

Role of defect structure in structural sensitivity of the oxidation reactions catalyzed by dispersed transition metal oxides (Sadykov, V.A. (158) 361)

Structure

Investigation of the structure of protohematite — metastable phase of ferrum (III) oxide (Burgina, E.B. (158) 257)

Structure transformations of copper chromite under reduction-reoxidation conditions (Plyasova, L.M. (158) 331) Highly-ordered aluminosilicate mesoporous mesophase materi-

als: physico-chemical properties and catalytic behaviour (Kodenev, E.G. (158) 349) Theoretical and low-temperature IR spectroscopic studies of catalytic complexes of aluminum chloride with nitroalkanes and nitrobenzene (Shilina, M.I. (158) 495) Subsurface hydrides Study of H₂, O₂, CO adsorption and $CO + O_2$ reaction on Pt(100), Pd(110) monocrystal surfaces (Gorodetskii, V.V. (158) (155)Sulfated zirconia Unusual manifestation of benzene radical cations in ESR spectra on sulfated zirconia (Bedilo, A.F. (158) 405) Development of an ESR technique for testing sulfated zirconia catalysts (Bedilo, A.F. (158) 409) Supported Co and Mo catalysts Characterization and catalytic performance of designed surfaces (Kawaguchi, T. (158) 67) Supported metallocenes Supported metallocenes using inorganic-organic hybrid xerogels (Dos Santos, J.H.Z. (158) 541) Supported Ziegler-Natta catalysts ²⁷Al MAS NMR study of the interaction of supported Ziegler-Natta catalysts with organoaluminium co-catalyst in the presence of donors (Potapov, A.G. (158) 457) Surface The determination of adsorption site structures of high dispersed oxides by EXAFS spectroscopy using molecules as probe (Kriventsov, V.V. (158) 287) Surface intermediates Determination of surface intermediates during the selective oxidation of formaldehyde over V-Ti-O catalyst by in situ FTIR spectroscopy (Popova, G.Ya. (158) 345) Surfaces New methods for determining surface structures (Marks, L.D. (158) 85) Surface Structures Structural transformations in overlayer and sticking probability during chemisorption: oxygen on (100) surface of metals (Salanov, A.N. (158) 367) Synergy effects In situ Raman spectroscopy — a valuable tool to understand operating catalysts (Mestl, G. (158) 45) Temperature The effects of process variables in the hydroformylation of methyl methacrylate with the in situ formed (othiomethylphenyl)diphenylphosphine rhodium complex (Reinius, H.K. (158) 499) Temporal of products (TAP) reactor Mechanistic insights in the activation of oxygen on oxide catalysts for the oxidative dehydrogenation of ethane from pulse experiments and contact potential difference measurements (Kondratenko, E.V. (158) 199) Thioether oxidation Kinetics and mechanism of thioether oxidation with H_2O_2 in the presence of Ti(IV)-substituted heteropolytungstates (Kholdeeva, O.A. (158) 223) Thiols Thiol protected platinum black and palladium black catalysts in oxidation catalysis (Berezin, M.Yu. (158) 567)

(o-Thiomethylphenyl)diphenylphosphine

The effects of process variables in the hydroformylation of methyl methacrylate with the in situ formed (*o*-thiomethylphenyl)diphenylphosphine rhodium complex (Reinius, H.K. (158) 499)

TiO₂

Phororedox and photocatalytic processes on Fe(III)–porphyrin surface modified nanocrystalline TiO_2 (Molinari, A. (158) 521)

 $TiO_2(110)$ single crystal

Characterization and catalytic performance of designed surfaces (Kawaguchi, T. (158) 67)

Titanium

Alkene and thioether oxidations with H₂O₂ over Ti-containing mesoporous mesophase catalysts (Kholdeeva, O.A. (158) 417) Titanium-substituted heteropolytungstates

Kinetics and mechanism of thioether oxidation with H_2O_2 in the presence of Ti(IV)-substituted heteropolytungstates (Kholdeeva, O.A. (158) 223)

TPD

The combined application of XPS and TPD to study of oxygen adsorption on graphite-supported silver clusters (Bukhtiyarov, V.I. (158) 167)

TPR

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Transition metal oxides

Role of defect structure in structural sensitivity of the oxidation reactions catalyzed by dispersed transition metal oxides (Sadykov, V.A. (158) 361)

Transition states

Olefin epoxidation by mono and bisperoxo complexes of Mo(VI): a density functional model study (Yudanov, I.V. (158) 189)

Trioctylamine

Synthesis and study of palladium colloids and related catalysts (Troitski, S.Yu. (158) 461)

Triple layer

Molecular-level studies of transition metal-support interactions during the first steps of catalysts preparation: platinum speciation in the hexachloroplatinate/alumina system (Shelimov, B.N. (158) 91)

Tungstated tin dioxide

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Synthesis and study of acid catalyst $30\% \text{ WO}_3/\text{SnO}_2$ (Maksimov, G.M. (158) 435)

UV-Vis

FTIR and UV–Vis characterization of Fe-Silicalite (Spoto, G. (158) 107)

⁵¹V

Active metal species assembled with heteropoly tungstate anion $PW_9O_{34}^{9-}$ for liquid phase hydrocarbon oxidation (Kuznetsova, L.I. (158) 429)

Vanadium-magnesium catalysts

Surface vanadium compounds in supported vanadium-magnesium catalysts for ethylene polymerization: X-ray photoelectron and infrared diffusion reflectance spectroscopy studies (Matsko, M.A. (158) 443)

Vanadium oxide catalysts

Raman studies of supported V, Cr and Sb oxides and their mechanical mixture with α -Bi₂Mo₃O₁₂ (Cortés Corberán, V. (158) 271)

Vibrational spectra

Analysis of the ab-initio force-fields of the polyatomic molecules followed by solution of the inverse spectral problem (Baltakhinov, V.P. (158) 399)

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Determination of surface intermediates during the selective oxidation of formaldehyde over V–Ti–O catalyst by in situ FTIR spectroscopy (Popova, G.Ya. (158) 345)

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Active metal species assembled with heteropoly tungstate anion $PW_9O_{34}^{9-}$ for liquid phase hydrocarbon oxidation (Kuznetsova, L.I. (158) 429)

Water-soluble rhodium complex

Homogeneous hydrogenation of olefins catalyzed by a novel tetrarhodium(II) complex as precursor in aqueous solution (Yang, Z. (158) 509)

XPS

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Supported metallocenes using inorganic–organic hybrid xerogels (Dos Santos, J.H.Z. (158) 541) X-ray photoelectron spectroscopy (XPS)

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Quantum-chemical investigation of the formation of Lewis acid centers of high-siliceous zeolites (Lamberov, A.A. (158) 481)

Zirconium oxides

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