Reactivities, reaction networks, and kinetics in high-pressure catalytic hydroprocessing

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#	Paper	IF	Citations
755	Characterization of the Surface of MoS2 Based Catalysts Using Thermal Methods. **1992**, 73, 3-10		3
754	Two-stage liquefaction of a Spanish subbituminous coal. **1993**, 33, 159-173		17
753	First-stage hydrocracking: process and catalytic aspects. **1993**, 35, 87-110		41
752	Deep desulphurisation and aromatics saturation for automotive gasoil manufacturing. **1993**, 35, 119-136		82
751	Effect of the hydrogen and hydrogen sulfide partial pressures in the hydrodesulfurisation of thiophene and hydrogenation of cyclohexene on rhodium-tungsten catalysts. *Applied Catalysis A: General*, **1993**, 107, 101-114	5.1	12
750	Hydrogenation of aromatics over hydrodenitrogenation-selective and hydrodesulfurization-selective catalysts. *Industrial & Engineering Chemistry Research*, **1993**, 32, 1568-1572	3.9	10
749	Hydrodesulfurization reactions of atmospheric gas oil over cobalt-molybdenum/alumina-aluminum borate catalysts. *Industrial & Engineering Chemistry Research*, **1993**, 32, 1573-1578	3.9	43
748	Development of A Micro Hydroprocessing Test for Rapid Evaluation of Catalysts. **1993**, 75, 1419-1430		
747	DEASPHALTING AND CHARACTERIZATION OF A SYNCRUDE OBTAINED BY DIRECT LIQUEFACTION OF A SPANISH SUBBITUMINOUS COAL. **1994**, 12, 1509-1538		1
746	A comparative analysis of the trickle-bed and the monolithic reactor for three-phase hydrogenations. **1994**, 49, 5653-5666		24
745	Vibrational assignment and analysis for 2,3-dihydrofuran and 2,5-dihydrofuran. **1994**, 50, 1725-1748		27
744	Promotion effects in bulk metal sulfide catalysts. *Applied Catalysis A: General*, **1994**, 114, 127-139	5.1	14
743	Kinetic study of the hydrogen sulfide effect in the conversion of thiophene on supported Co?Mo catalysts. **1994**, 94, 369-387		17
742	Hydrodesulfurization and hydrogenation of aromatic compounds catalyzed by Ni-Mo/□Al2O3: effects of nickel sulfide and vanadium sulfide deposits. **1994**, 26, 1-7		6
741	Aromatic Hydrogenation Catalysis: A Review. **1994**, 36, 75-123		629
740	PURIFICATION OF 1,2-DIHYDRONAPHTHALENE- AN IMPORTANT INTERMEDIATE IN THE HYDROPROCESSING OF NAPHTHALENE. **1994**, 26, 370-373		0
739	Stepwise activation of □thienyl ligands at di-tungsten centres. **1994**, 683-684		13

738	Catalytic Hydroprocessing of Simulated Heavy Coal Liquids. 2.Reaction Networks of Aromatic Hydrocarbons and Sulfur and Oxygen Heterocyclic Compounds. *Industrial & Engineering Chemistry Research*, **1994**, 33, 2301-2313	3.9	14
737	Olefin versus sulfur coordination of benzo[b]thiophene (BT) in Cp(CO)2Re(2:3-2-BT)Cr(CO)3. **1995**, 240, 393-398		14
736	Studies of the mechanism of thiophene hydrodesulfurization: 2H NMR and mass spectral analysis of 1,3-butadiene produced in the deuterodesulfurization (DDS) of thiophene over PbMo6S8 catalyst. **1995**, 96, 283-299		35
735	Catalytic hydrotreatment of Illinois No. 6 Coalderived naphtha: Comparison of molybdenum nitride and molybdenum sulfide for heteroatom removal. *Applied Catalysis A: General*, **1995**, 123, 229-250	5.1	23
734	The effect of phosphorus on the HDN reaction of piperidine, decahydroquinoline and ortho-propylaniline over Ni-MoS2/Al2O3 catalysts. **1995**, 35, 193-203		26
733	Polynuclear Aromatic Hydrocarbons Hydrogenation. 1. Experimental Reaction Pathways and Kinetics. *Industrial & Engineering Chemistry Research*, **1995**, 34, 101-117	3.9	105
732	Kinetics of chemically modified lignin peroxidase and enzymatic oxidation of aromatic nitrogen-containing compounds. **1995**, 42, 675-681		20
731	Catalytic Hydroprocessing of Aromatic Compounds: Effects of Nickel and Vanadium Sulfide Deposits on Reactivities and Reaction Networks. *Industrial & Engineering Chemistry Research*, **1996**, 35, 3203-3209	3.9	15
730	Hydrotreating Catalysis. **1996**, 1-269		407
729	Catalytic Hydrocracking of an Asphaltenic Coal Residue. *Energy & Fuels*, **1996**, 10, 1235-1240	4.1	11
728	Evaluation of Alumina/Aluminum Phosphate Catalyst Supports for Hydrodenitrogenation of Pyridine and Coal-Derived Liquids. *Energy & Fuels*, **1996**, 10, 579-586	4.1	4
727	Opening and Hydrogenation of Dinaphtho[2,1-b:1′,2′-d]thiophene (DNT) by Soluble Rhodium and Iridium Complexes. Homogeneous Hydrogenolysis of DNT to 1,1′-Binaphthalene-2-thiol by Rhodium Catalysis. **1996**, 15, 4604-4611		35
726	Upgrading of an Asphaltenic Coal Residue:´Thermal Hydroprocessing. *Energy & Fuels*, **1996**, 10, 401-408	4.1	14
725	A Review of Deep Hydrodesulfurization Catalysis. **1996**, 38, 161-188		169
724	Hydrodesulfurization of Refractory Sulfur Species. 2. Selective Hydrodesulfurization of 4,6-Dimethyldibenzothiophene in the Dominant Presence of Naphthalene over Ternary Sulfides Catalyst. *Energy & Fuels*, **1996**, 10, 487-492	4.1	19
723	Heavy Oil Hydroprocessing with the Addition of Hydrogen-Donating Hydrocarbons Derived from Petroleum *Energy & Fuels*, **1996**, 10, 474-481	4.1	14
722	Hydrodenitrogenation of pyridine over activated carbon-supported sulfided Mo and NiMo catalysts. Effects of hydrogen sulfide and oxidation of the support. **1996**, 40, 229-234		7
721	Homogene hydrierende Entschwefelung von Benzo[b]thiophen, durch eine aktive HDS-Komponente (W) und begleitende Unterstützung eines metallischen Vermittlers (Rh) erzielt. **1996**, 108, 1845-1847		2

720	Medium-severity hydrotreating and hydrocracking of Israeli shale oil. 1. Novel catalyst systems. *Fuel* , **1996**, 75, 858-866	7.1	23
719	Deep hydrodesulfurization of diesel fuel: Design of reaction process and catalysts. *Catalysis Today*, **1996**, 29, 185-189	5.3	87
718	Aromatics saturation by sulfided Nickel?Molybdenum hydrotreating catalysts. *Catalysis Today*, **1996** , 29, 203-207	5.3	11
717	Influence of water and ammonia on hydrotreating catalysts and activity for tetralin hydrogenation. *Catalysis Today*, **1996**, 29, 229-233	5.3	9
716	Hydrogenolysis reactions in a batch reactor effect of mass balance inaccuracies on the kinetic parameters. *Applied Catalysis A: General*, **1996**, 135, 317-328	5.1	9
715	Deep hydrodesulfurization of DBT and diesel fuel on supported Pt and Ir catalysts. *Applied Catalysis A: General*, **1996**, 137, 269-286	5.1	42
714	Hydrotreating of compounds containing both oxygen and sulfur: effect of para-hydroxyl substituent on the reactions of mercapto and methylmercapto groups. *Applied Catalysis A: General*, **1996**, 145, 237-251	5.1	8
713	Dibenzothiophene hydrodesulfurization on silica-alumina-supported transition metal sulfide catalysts. *Applied Catalysis A: General*, **1996**, 148, 23-40	5.1	39
712	Activity of noble metal-promoted hydroprocessing catalysts for pyridine HDN and naphthalene hydrogenation. **1996**, 49, 137-155		14
711	Reaction Kinetics of the hydrodenitrogenation of decahydroquinoline over NiMo(P)/Al2O3 catalysts. **1996**, 87-96		15
710	Hydrodenitrogenation of indole over NiMo sulfide catalysts. **1996**, 1223-1232		22
709	Simultaneous HDN/HDS of model compounds over Ni-Mo sulfide catalysts. **1997**, 106, 69-82		10
708	Difference of Kinetics between Powdered and Pelletized Catalysts in Liquid-Phase Hydrogenation of 1-Methylnaphthalene. **1997**, 30, 64-71		3
707	Hydrotreating of compounds and mixtures of compounds having mercapto and hydroxyl groups. **1997**, 106, 343-352		13
706	Kinetic modelling of HDN reaction over (Ni)Mo(P)/Al2O3 catalysts. **1997**, 106, 415-420		2
705	Hydrodesulfurization of Atmospheric Gas Oil over NiMo/Aluminum Borate Catalysts in a Trickle Bed Reactor. *Industrial & Engineering Chemistry Research*, **1997**, 36, 2521-2525	3.9	15
704	Liquid-Biphase Hydrogenolysis of Benzo[b]thiophene by Rhodium Catalysis. **1997**, 119, 4945-4954		61
703	Mimicking the HDS Activity of Promoted Tungsten Catalysts. A Homogeneous Modeling Study Using a Two-Component Tungsten/Rhodium System. **1997**, 16, 5696-5705		23

702	Homogeneous Hydrogenation of Benzo[b]thiophene by Use of Rhodium and Iridium Complexes as the Catalyst Precursors: Kinetic and Mechanistic Aspects **1997**, 16, 2465-2471		28
701	Ring-Opening of Thienyl and Furyl Ligands at Ditungsten (M?M) Centers. **1997**, 119, 1634-1647		19
700	Homolytic CS Bond Scission in the Desulfurization of Aromatic and Aliphatic Thiols Mediated by a Mo/Co/S Cluster:´Mechanistic Aspects Relevant to HDS Catalysis. **1997**, 119, 1027-1036		103
699	Hydrocracking of Polynuclear Aromatic Hydrocarbons. Development of Rate Laws through Inhibition Studies. *Industrial & Engineering Chemistry Research*, **1997**, 36, 2041-2050	3.9	49
698	Deep Hydrodesulfurization of Light Gas Oil. 1. Kinetics and Mechanisms of Dibenzothiophene Hydrodesulfurization. *Industrial & Engineering Chemistry Research*, **1997**, 36, 5146-5152	3.9	65
697	Dual-functional Ni-Mo sulfide catalysts on zeolite-alumina supports forhydrotreating and hydrocracking of heavy oils. **1997**, 106, 115-128		15
696	Hydrotreatment Activities of Supported Molybdenum Nitrides and Carbides. *Energy & Fuels*, **1997**, 11, 668-675	4.1	68
695	Development of a Cosmo deep HDS catalyst for diesel fuel. *Catalysis Today*, **1997**, 35, 45-50	5.3	26
694	Hydrotreating catalysts, an old story with new challenges. *Catalysis Today*, **1997**, 36, 375-391	5.3	88
693	Second row transition metal sulfides for the hydrotreatment of coal-derived naphtha II. Removal of individual sulfur compounds. *Applied Catalysis A: General*, **1997**, 150, 319-342	5.1	20
692	Deuterium Tracer Studies on Hydrotreating CatalystsIsotopic Exchange between Hydrogen and Hydrogen Sulfide on Sulfided NiMo/Al2O3. *Journal of Catalysis*, **1997**, 167, 1-11	7.3	38
691	Comparative Study of Activity and Selectivity of Transition Metal Sulfides in Parallel Hydrodechlorination of Dichlorobenzene and Hydrodesulfurization of Methylthiophene. *Journal of Catalysis*, **1997**, 167, 286-295	7.3	46
690	Hydrogenation of Aromatics in Diesel Fuels on Pt/MCM-41 Catalysts. *Journal of Catalysis*, **1997**, 169, 480-489	7.3	202
689	Second row transition metal sulfides for the hydrotreatment of coal-derived naphtha I. Catalyst preparation, characterization and comparison of rate of simultaneous removal of total sulfur, nitrogen and oxygen. *Applied Catalysis A: General*, **1997**, 150, 297-318	5.1	48
688	Second row transition metal sulfides for the hydrotreatment of coal derived naphtha III. Removal of individual nitrogen compounds. *Applied Catalysis A: General*, **1997**, 150, 343-364	5.1	7
687	Efficient rhodium catalysts for the hydrogenolysis of thiophenic molecules in homogeneous phase. **1997**, 16, 3099-3114		36
686	An overview of modeling studies in HDS, HDN and HDO catalysis. **1997**, 16, 3073-3088		153
685	Reactivities in deep catalytic hydrodesulfurization: challenges, opportunities, and the importance of 4-methyldibenzothiophene and 4,6-dimethyldibenzothiophene. **1997**, 16, 3213-3217		227

684	Mechanism and kinetics of hydrodenitrogenation. **1997**, 16, 3235-3246		55
683	Insertion of iridium into C-H and C-S bonds of 2,5-dimethylthiophene 2-methylbenzothiophene and 4,6-dimethyldibenzothiophene. **1997**, 541, 143-155		24
682	Through a glass, darkly: Kinetics and reactors for complex mixtures syncrude innovation award lecture. **1997**, 75, 481-493		3
681	Investigation of intrinsic hydrodesulphurization kinetics of a VGO in a trickle bed reactor with backmixing effects. **1998**, 53, 3449-3458		24
680	Medium severity hydrotreating and hydrocracking of Israeli shale oil II. Testing of novel catalyst systems in a trickle bed reactor. *Fuel*, **1998**, 77, 3-13	7.1	24
679	Synthesis and characterization of heterobimetallic complexes containing C-S cleaved thiophenes. **1998**, 272, 55-61		6
678	Structure and Nature of the Active Sites in CoMo Hydrotreating Catalysts Conversion of Thiophene. *Journal of Catalysis*, **1998**, 175, 108-116	7.3	25
677	NiMoS/Al2O3Catalysts: The Nature and the Aging Behavior of Active Sites in HDN Reactions. *Journal of Catalysis*, **1998**, 178, 457-465	7.3	29
676	Mechanism of the Hydrodenitrogenation of Quinoline over NiMo(P)/Al2O3Catalysts. *Journal of Catalysis*, **1998**, 179, 18-27	7.3	68
675	Influence of different diluents in Pt/Al2O3 catalyst on the hydrogenation of benzene, toluene and o-xylene. *Applied Catalysis A: General*, **1998**, 175, 191-199	5.1	42
674	Microbial denitrogenation of fossil fuels. **1998**, 16, 390-5		74
673	Catalytic hydrogenation of aromatic hydrocarbons in a trickle bed reactor. **1998**, 72, 74-84		1
672	Studies of molybdenum sulfide catalyst ex ammonium tetrathiomolybdate: effect of pretreatment on hydrodesulfurization of dibenzothiophene. *Applied Catalysis A: General*, **1998**, 168, 205-217	5.1	19
671	Kinetics of dibenzothiophene hydrodesulfurization over MoS2 supported catalysts: modelization of the H2S partial pressure effect. *Applied Catalysis A: General*, **1998**, 170, 195-206	5.1	53
670	Key parameters in deep hydrodesulfurization of diesel fuel. *Applied Catalysis A: General*, **1998**, 170, 1-12	5.1	112
669	A study on the preparation of supported metal oxide catalysts using JRC-reference catalysts. I. Preparation of a molybdena–alumina catalyst. Part 3. Drying process. *Applied Catalysis A: General*, **1998**, 170, 343-357	5.1	15
668	Selection of catalysts and reactors for hydroprocessing. *Applied Catalysis A: General*, **1998**, 171, 177-206	5.1	159
667	Mesoporous molecular sieve MCM-41 supported CoMo catalyst for hydrodesulfurization of petroleum resids. *Catalysis Today*, **1998**, 43, 261-272	5.3	75

666	Assessment of limitations and potentials for improvement in deep desulfurization through detailed kinetic analysis of mechanistic pathways. *Catalysis Today*, **1998**, 45, 299-305	5.3	49
665	Kinetics of sulfur model molecules competing with H2S as a tool for evaluating the HDS activities of commercial CoMo/Al2O3 catalysts. *Catalysis Today*, **1998**, 45, 347-352	5.3	14
664	Catalytic hydroprocessing of chlorobenzene/pyridine mixtures. **1998**, 60, 271-285		12
663	Influence of heteroatom removal on aromatic hydrogenation. **1998**, 55, 93-99		1
662	The Literature of Heterocyclic Chemistry, Part V. **1998**, 71, 291-378		16
661	Real-Time Characterization of the Organic Composition and Size of Individual Diesel Engine Smoke Particles. **1998**, 32, 2672-2679		50
660	Hydrogenation, Hydrogenolysis, and Desulfurization of Thiophenes by Soluble Metal Complexes: Recent Achievements and Future Directions. **1998**, 31, 109-116		166
659	Hydrodesulfurization Catalyst Evaluation in an Upflow Three-Phase Microreactor. *Industrial & Engineering Chemistry Research*, **1998**, 37, 2662-2667	3.9	27
658	Kinetic study of the HDN of quinoline over NiMo(P)/Al2O3 catalysts. **1998**, 111-123		9
657	Synthesis of Active Hydrodesulfurization Carbon-Supported CoMo Catalysts. Relationships between Preparation Methods and Activity/Selectivity. *Industrial & Engineering Chemistry Research*, **1998**, 37, 3533-3539	3.9	55
656	Hydrodesulfurization of Cold Lake Diesel Fraction Using Dispersed Catalysts: Influence of Hydroprocessing Medium and Sources of H2. *Energy & Fuels*, **1998**, 12, 598-606	4.1	14
655	Kinetics of Sulfur Removal from a Liquid Coal Residue in Thermal, Hydrothermal, and Hydrocatalytic Cracking. *Energy & Fuels*, **1998**, 12, 365-370	4.1	8
654	Kinetics of the Hydrodenitrogenation of Decahydroquinoline over NiMo(P)/Al2O3 Catalysts. *Industrial & Engineering Chemistry Research*, **1998**, 37, 834-840	3.9	28
653	Present State of the Art and Future Challenges in the Hydrodesulfurization of Polyaromatic Sulfur Compounds. **1998**, 345-471		294
652	Binding and Reactivity of Thiophene-Type Ligands in Transition Metal Complexes and Clusters. **1998**, 89-127		3
651	Effect of light cycle oil on diesel hydrotreatment. **1999**, 127, 343-346		6
650	Kinetic and reactor models for HDT of middle distillates. **1999**, 23, S791-S794		1
649	Mesoporous molecular sieve MCM-41 supported CoMo catalyst for hydrodesulfurization of dibenzothiophene in distillate fuels. *Applied Catalysis A: General*, **1999**, 176, 1-10	5.1	129

648	Hydrodenitrogenation of pyridine over GaNiMo/Al2O3 catalyst: effect of gallium. *Applied Catalysis A: General*, **1999**, 179, 145-153	5.1	12
647	Hydrotreating of straight run gas oil□ght cycle oil blends. *Applied Catalysis A: General*, **1999**, 180, 195-205	5.1	56
646	Deep desulfurization of diesel fuels: kinetic modeling of model compounds in trickle-bed. *Catalysis Today*, **1999**, 48, 41-48	5.3	39
645	Gas oil deep hydrodesulfurization: refractory compounds and retarded kinetics. *Catalysis Today*, **1999**, 49, 87-97	5.3	70
644	Deactivation of hydroprocessing catalysts. *Catalysis Today*, **1999**, 52, 381-495	5.3	535
643	Dibenzothiophene hydrodesulfurization on HY-zeolite-supported transition metal sulfide catalysts. **1999**, 61, 73-88		35
642	Effect of hydrogen sulfide on the hydrotreating of middle distillates over CoMo/Al2O3 catalyst. *Applied Catalysis A: General*, **1999**, 183, 265-272	5.1	18
641	Thermodynamic properties of the methylpyridines. Part 2. Vapor pressures, heat capacities, critical properties, derived thermodynamic functions between the temperatures 250 K and 560 K, and equilibrium isomer distributions for all temperatures □250 K. **1999**, 31, 339-378		25
640	Modeling the Hydrodesulfurization Reaction at Nickel. Unusual Reactivity of Dibenzothiophenes Relative to Thiophene and Benzothiophene. **1999**, 121, 7606-7617		156
639	Conversion of model sulfur compounds to characterize hydrodesulfurization CoMo/Al2O3 catalysts. **1999**, 127, 51-65		15
638	Influence of the hydrogen sulfide partial pressure on the hydrodeoxygenation reactions over sulfided CoMo/Carbon catalysts. **1999**, 85-95		5
637	Stability of CoMo/Al2O3 catalysts: Effect of HDO cycles on HDS. **1999**, 127, 145-152		15
636	Electrophilic Additions to □-Thiophene Complexes: Synthesis of Novel Thiophenium and Thiafulvenium Species. **1999**, 18, 2988-2998		13
635	Hydroprocessing of a Maya Residue. Intrinsic Kinetics of Sulfur-, Nitrogen-, Nickel-, and Vanadium-Removal Reactions. *Energy & Fuels*, **1999**, 13, 629-636	4.1	40
634	Hydrocracking of Pyrenes over a Nickel-Supported Y-Zeolite Catalyst and an Assessment of the Reaction Mechanism Based on MD Calculations. *Energy & Fuels*, **1999**, 13, 617-623	4.1	14
633	Upgrading of a Petroleum Residue. Kinetics of Conradson Carbon Residue Conversion. *Industrial & Engineering Chemistry Research*, **1999**, 38, 938-943	3.9	15
632	Design of a model activity test for second stage deep HDS catalysts. **1999**, 127, 211-218		6
631	Hydroprocessing kinetics for oil fractions. **1999**, 179-186		10

630	A cape of HDT industrial reactor for middle distillates. **2000**, 24, 1731-1735		16
629	Catalysis science and technology for cleaner transportation fuels. *Catalysis Today*, **2000**, 62, 77-90	5.3	164
628	Molecular simulation on hydrodesulfurization of thiophenic compounds over MoS2 using ZINDO. **2000**, 160, 409-427		47
627	Transformation of phosphomolybdates into an active catalyst with potential application in hydroconversion processes. *Applied Catalysis A: General*, **2000**, 201, 177-190	5.1	11
626	Reaction network of indole hydrodenitrogenation over NiMoS/Al2O3 catalysts. *Applied Catalysis A: General*, **2000**, 190, 51-60	5.1	47
625	Catalytic hydrodeoxygenation. *Applied Catalysis A: General*, **2000**, 199, 147-190	5.1	994
624	Activities of unsupported second transition series metal sulfides for hydrodesulfurization of sterically hindered 4,6-dimethyldibenzothiophene and of unsubstituted dibenzothiophene. **2000**, 65, 169-174		53
623	Hydrodesulfurization Studies with a Single-Layer Molybdenum Disulfide Catalyst. *Journal of Catalysis*, **2000**, 193, 96-102	7.3	15
622	Kinetics of individual and simultaneous hydrodenitrogenations of aniline and pyridine. *Applied Catalysis A: General*, **2000**, 201, 115-120	5.1	9
621	Mechanism of the hydrodenitrogenation of o-toluidine and methylcyclohexylamine over NiMo/Al2O3. *Topics in Catalysis*, **2000**, 11/12, 327-333	2.3	19
620	Identification and Reactivity of Nitrogen Molecular Species in Gas Oils. *Energy & Fuels*, **2000**, 14, 539-544	4.1	53
619	Fullerene Evolution in Flame-Generated Soot. **2000**, 122, 11596-11601		29
618	Assessing Compositional Changes of Nitrogen Compounds during Hydrotreating of Typical Diesel Range Gas Oils Using a Novel Preconcentration Technique Coupled with Gas Chromatography and Atomic Emission Detection. *Industrial & Engineering Chemistry Research*, **2000**, 39, 533-540	3.9	75
617	Changes in Desulfurization Reactivity of 4,6-Dimethyldibenzothiophene by Skeletal Isomerization Using a Ni-Supported Y-Type Zeolite. *Energy & Fuels*, **2000**, 14, 585-590	4.1	28
616	Hydroprocessing of a Maya Residue. II. Intrinsic Kinetics of the Asphaltenic Heteroatom and Metal Removal Reactions. *Energy & Fuels*, **2000**, 14, 1309-1313	4.1	19
615	Photochemical Denitrogenation Processes for Light Oils Effected by a Combination of UV Irradiation and Liquid−Liquid Extraction. *Industrial & Engineering Chemistry Research*, **2000**, 39, 2826-2836	3.9	18
614	Kinetic Modeling of the Effect of H2S and of NH3 on Toluene Hydrogenation in the Presence of a NiMo/Al2O3 Hydrotreating Catalyst. Discrimination between Homolytic and Heterolytic Models. **2001**, 105, 10860-10866		14
613	Catalytic hydrodenitrogenation. **2001**, 46, 399-464		108

612	Elemental Composition Analysis of Processed and Unprocessed Diesel Fuel by Electrospray Ionization Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. *Energy & Fuels*, **2001**, 15, 1186-1193	4.1	160
611	Catalytic Hydroprocessing of Aromatic Compounds: Effects of Metal Sulfide Deposits Formed in Commercial Residuum Hydroprocessing. *Industrial & Engineering Chemistry Research*, **2001**, 40, 131-135	3.9	10
610	A Novel Desulfurization Process for Fuel Oils Based on the Formation and Subsequent Precipitation ofS-Alkylsulfonium Salts. 5. Denitrogenation Reactivity of Basic and Neutral Nitrogen Compounds. *Industrial & Engineering Chemistry Research*, **2001**, 40, 4919-4924	3.9	12
609	Photochemical Desulfurization and Denitrogenation Process for Vacuum Gas Oil Using an Organic Two-Phase Extraction System. *Industrial & Engineering Chemistry Research*, **2001**, 40, 293-303	3.9	51
608	A Novel Desulfurization Process for Fuel Oils Based on the Formation and Subsequent Precipitation of S-Alkylsulfonium Salts. 4. Desulfurization and Simultaneous Denitrogenation of Vacuum Gas Oil. *Industrial & Engineering Chemistry Research*, **2001**, 40, 3398-3405	3.9	10
607	Comparison of Hydrodenitrogenation of Basic and Nonbasic Nitrogen Compounds Present in Oil Sands Derived Heavy Gas Oil. *Energy & Fuels*, **2001**, 15, 377-383	4.1	73
606	Hydrodechlorination of chlorobenzene-tetrachloroethylene mixtures over a Pd/Al2O3 csatalyst. **2001**, 521-526		5
605	Organic nitrogen compounds in gas oil blends, their hydrotreated products and the importance to hydrotreatment. *Catalysis Today*, **2001**, 65, 307-314	5.3	140
604	Inhibition and deactivation in staged hydrodenitrogenation and hydrodesulfurization of medium cycle oil over NiMoS/Al2O3 catalyst. *Applied Catalysis A: General*, **2001**, 205, 101-108	5.1	48
603	On the difference between gas- and liquid-phase hydrotreating test reactions. *Applied Catalysis A: General*, **2001**, 207, 25-36	5.1	28
602	Catalytic hydrotreating of middle distillates blends in a fixed-bed pilot reactor. *Applied Catalysis A: General*, **2001**, 207, 407-420	5.1	28
601	Simultaneous hydrodesulfurization and hydrodeoxygenation: interactions between mercapto and methoxy groups present in the same or in separate molecules. *Applied Catalysis A: General*, **2001**, 209, 33-43	5.1	37
600	The role of fluorine, nickel and full sulfidation in the hydrodenitrogenation of o-toluidine over tungsten-based catalysts prepared from oxy- and thiosalts. *Applied Catalysis A: General*, **2001**, 216, 103-115	5.1	10
599	Oxidation reactivities of dibenzothiophenes in polyoxometalate/H2O2 and formic acid/H2O2 systems. *Applied Catalysis A: General*, **2001**, 219, 267-280	5.1	325
598	Modelling the Hydrodenitrogenation of Aromatic N-Heterocycles in the Homogeneous Phase. **2001** , 2001, 43-68		57
597	Liquid phase hydrogenation of tetralin on Ni/Al2O3. **2001**, 56, 1247-1254		40
596	Influences of the Hydrogen Sulfide Partial Pressure and of a Nitrogen Compound on the Hydrodeoxygenation Activity of a CoMo/Carbon Catalyst. *Journal of Catalysis*, **2001**, 198, 47-55	7.3	112
595	Direct Aromatic C□N Bond Cleavage Evidenced in the Hydrodenitrogenation of 2,6-Dimethylaniline over Cobalt-Promoted Mo/Al2O3 Sulfide Catalysts: A Reactivity and FT-IR Study. *Journal of Catalysis*, **2001**, 202, 78-88	7.3	25

594	A Kinetic Investigation of the Effects of Fluorine and Nickel on the HDN of Toluidine on Fully Sulfided Tungsten Sulfide Catalysts. *Journal of Catalysis*, **2001**, 203, 192-200	7.3	13
593	Hydrogenation and Ring-Opening of Tetralin on Ni and NiMo Supported on Alumina-Pillared Zirconium Phosphate Catalysts. A Thiotolerance Study. *Journal of Catalysis*, **2001**, 203, 122-132	7.3	48
592	Organometallic compounds of furan, thiophene, and their benzannulated derivatives. **2001**, 78, 1-64		25
591	Liquid Phase Hydrogenation of Naphthalene on Ni/Al2O3. **2001**, 309-316		6
590	HYDROGEN ACTIVATION BY TRANSITION METAL SULFIDES. **2002**, 44, 651-735		123
589	Hydrodesulfurization and Hydrodenitrogenation. **2002**, 1-34		3
588	Coordination and Activation of Thiophenes in Metal Complexes. **2002**, 35-61		2
587	Catalysis. **2002**,		
586	Liquid-Phase Hydrogenation of Naphthalene and Tetralin on Ni/Al2O3: Kinetic Modeling. *Industrial & Engineering Chemistry Research*, **2002**, 41, 5966-5975	3.9	35
585	Hydrogenation of Indole by Phosphine-Modified Rhodium and Ruthenium Catalysts. **2002**, 21, 1430-1437		35
584	Hydrotreating Chemistry of Model Products from Bioprocessing of Carbazoles. *Energy & Fuels*, **2002**, 16, 1076-1086	4.1	10
583	Catalytic Hydrodechlorination of Chlorinated Olefins over a Pd/Al2O3 Catalyst: Kinetics and Inhibition Phenomena. *Industrial & Engineering Chemistry Research*, **2002**, 41, 505-511	3.9	37
582	Performance Evaluation of Hydroprocessing CatalystsA Review of Experimental Techniques. *Energy & Fuels*, **2002**, 16, 774-784	4.1	50
581	Changes in Apparent Reaction Order and Activation Energy in the Hydrodesulfurization of Real Feedstocks. *Energy & Fuels*, **2002**, 16, 189-193	4.1	50
580	Hydrogenation of Cyclohexene over in Situ Fluorinated NiMoS Catalysts Supported on Alumina and Silica−Alumina. *Journal of Catalysis*, **2002**, 207, 286-295	7.3	15
579	Trickle-bed reactor model for desulfurization and dearomatization of diesel. **2002**, 48, 126-135		68
578	Hydrodechlorination of tetrachloroethylene over sulfided catalysts: kinetic study. *Catalysis Today*, **2002**, 73, 325-331	5.3	13
577	Characteristics of Al-MCM-41 supported Pt catalysts: effect of Al distribution in Al-MCM-41 on its catalytic activity in naphthalene hydrogenation. *Catalysis Today*, **2002**, 74, 281-290	5.3	59

576	Hydrogenation of naphthalene and methylnaphthalene: modeling and spectroscopy. **2002**, 185, 211-222		3
575	Comparative inhibiting effect of polycondensed aromatics and nitrogen compounds on the hydrodesulfurization of alkyldibenzothiophenes. *Applied Catalysis A: General*, **2002**, 231, 253-261	5.1	95
574	Preliminary study on mechanism of naphthalene hydrogenation to form decalins via tetralin over Pt/TiO2. **2002**, 79, 77-80		23
573	Modelling diffusion and reaction accompanied by capillary condensation using three-dimensional pore networks. Part 1. Fickian diffusion and pseudo-first-order reaction kinetics. **2002**, 57, 3033-3045		33
572	Modelling diffusion and reaction accompanied by capillary condensation using three-dimensional pore networks. Part 2. Dusty gas model and general reaction kinetics. **2002**, 57, 3047-3059		43
571	Low-Temperature Hydrodesulfurization of Thiophene on Ni/Pt(111) Bimetallic Surfaces with Monolayer Ni Coverage. *Journal of Catalysis*, **2002**, 205, 259-265	7.3	51
570	Metal Complexes as Hydrogenation Catalysts. **2003**, 75-139		13
569	Recombinant carbazole-degrading strains for enhanced petroleum processing. **2003**, 30, 6-12		28
568	New design approaches to ultra-clean diesel fuels by deep desulfurization and deep dearomatization. **2003**, 41, 207-238		894
567	Terpenoid-Derived Sulfides as Ultimate Organic Sulfur Compounds in Extensively Desulfurized Fuels. **2003**, 115, 4794-4797		3
566	Terpenoid-derived sulfides as ultimate organic sulfur compounds in extensively desulfurized fuels. **2003**, 42, 4646-9		12
565	Possible precursors and products of deep hydrodesulfurization of gasoline and distillate fuels. Part 2. The thermodynamic properties of 2,3-dihydrobenzo[b]thiophene. **2003**, 35, 1253-1276		10
564	Kinetic study of the gas-phase hydrogenation of aromatic and aliphatic organochlorinated compounds using a Pd/Al2O3 catalyst. **2003**, 97, 281-94		39
563	Deep desulfurization of middle distillates: process adaptation to oil fractions compositions. *Catalysis Today*, **2003**, 79-80, 371-381	5.3	29
562	Inhibition effects of organosulphur compounds on the hydrodechlorination of tetrachloroethylene over Pd/Al2O3 catalysts. *Catalysis Today*, **2003**, 84, 121-127	5.3	5
561	Silica lumina-supported transition metal sulphide catalysts for deep hydrodesulphurization. *Catalysis Today*, **2003**, 86, 73-85	5.3	31
560	An overview of new approaches to deep desulfurization for ultra-clean gasoline, diesel fuel and jet fuel. *Catalysis Today*, **2003**, 86, 211-263	5.3	1611
559	MCM-41-supported Co-Mo catalysts for deep hydrodesulfurization of light cycle oil. *Catalysis Today*, **2003**, 86, 129-140	5.3	89

558	Influence of nitrogen compounds on deep hydrodesulfurization of 4,6-dimethyldibenzothiophene over Al2O3- and MCM-41-supported Co-Mo sulfide catalysts. *Catalysis Today*, **2003**, 86, 265-275	5.3	72
557	Inhibition effects of nitrogen compounds on the hydrodesulfurization of dibenzothiophene: Part 2. *Applied Catalysis A: General*, **2003**, 243, 207-214	5.1	66
556	Nickel-impregnated zirconium-doped mesoporous molecular sieves as catalysts for the hydrogenation and ring-opening of tetralin. *Applied Catalysis A: General*, **2003**, 240, 83-94	5.1	36
555	Self-inhibition observed during indole and o-ethylaniline hydrogenation in the presence of dibenzothiophene. *Applied Catalysis A: General*, **2003**, 242, 311-320	5.1	20
554	Property–reactivity correlation for HDS of middle distillates. *Applied Catalysis A: General*, **2003**, 244, 115-128	5.1	37
553	Radioisotopic study of (Co)Mo/Al2O3 sulfide catalysts for HDS. *Applied Catalysis A: General*, **2003**, 251, 187-198	5.1	21
552	Influences of nitrogen species on the hydrodesulfurization reactivity of a gas oil over sulfide catalysts of variable activity. *Applied Catalysis A: General*, **2003**, 252, 331-346	5.1	80
551	Effect of surface proton exchange on hydrodesulfurization performance of MCM-41-supported catalysts. *Applied Catalysis A: General*, **2003**, 254, 319-326	5.1	29
550	Various Approaches in Kinetics Modeling of Real Feedstock Hydrodesulfurization. **2003**, 21, 157-181		8
549	Reactivity of the Bis(dihydrogen) Complex [RuH2(η2-H2)2(PCy3)2] toward N-Heteroaromatic Compounds. Regioselective Hydrogenation of Acridine to 1,2,3,4,5,6,7,8-Octahydroacridine. **2003**, 22, 1630-1637		50
548	Kinetics of the HDN of Quinoline under Vapor-Phase Conditions. *Industrial & Engineering Chemistry Research*, **2003**, 42, 1011-1022	3.9	13
547	Elucidation of Retarding Effects of Sulfur and Nitrogen Compounds on Aromatic Compounds Hydrogenation. *Energy & Fuels*, **2003**, 17, 1338-1345	4.1	13
546	Comparison of Hydrodenitrogenation of Model Basic and Nonbasic Nitrogen Species in a Trickle Bed Reactor Using Commercial NiMo/Al2O3Catalyst. *Energy & Fuels*, **2003**, 17, 164-171	4.1	37
545	Adsorption of Dibenzothiophene Derivatives over a MoS2 NanoclusterA Density Functional Theory Study of Structure–Reactivity Relations. *Energy & Fuels*, **2003**, 17, 387-398	4.1	58
544	Dual character of H2S as promoter and inhibitor for hydrodesulfurization of dibenzothiophene. **2003**, 4, 321-326		27
543	Hydrodesulfurization of Dibenzothiophenic Compounds in a Light Cycle Oil. **2003**, 21, 911-935		19
542	A Comparative Study of the Effect of Catalyst Type on Hydrotreating Kinetics of Kuwaiti Atmospheric Residue. *Energy & Fuels*, **2003**, 17, 661-668	4.1	54
541	Hydrogenation and Ring Opening of Tetralin on Supported Nickel Zirconium-Doped Mesoporous Silica Catalysts. Influence of the Nickel Precursor. **2003**, 19, 4985-4991		52

540	Product Selectivity during Hydrotreating and Mild Hydrocracking of Bitumen-Derived Gas Oil. *Energy & Fuels*, **2003**, 17, 1372-1381	4.1	45
539	A kinetic study on hydrodesulfurization of dibenzothiophene catalyzed by sulfided Ni-Mo/MCM-41. **2003**, 15, 1228-1233		1
538	Hydrogenation of aromatics on Pt/Pd bimetallic catalyst supported by al- containing mesoporous silica. **2003**, 146, 717-720		3
537	Hydrodesulfurizatton of dibenzothiophene over proton-exchanged siliceous MCM-41 supported bimetallic sulfides. **2004**, 2930-2935		1
536	An approach to the deep hydrodesulfurization of light cycle oil. **2004**, 53, 275-283		27
535	Benzene elimination from reformate gasoline by high pressure hydrogenation in a fixed-bed reactor. **2004**, 82, 149-155		10
534	Deep desulfurization of oil refinery streams by extraction with ionic liquids. **2004**, 6, 316-322		481
533	Effective supports to moderate H2S inhibition on cobalt and nickel molybdenum sulfide catalysts in deep desulfurization of gas oil. *Applied Catalysis A: General*, **2004**, 260, 185-190	5.1	23
532	HDS kinetics study of dibenzothiophenic compounds in LCO. *Catalysis Today*, **2004**, 98, 227-233	5.3	30
531	Deep removal of sulfur and aromatics from diesel through two-stage concurrently and countercurrently operated fixed-bed reactors. **2004**, 59, 5465-5472		24
530	HDS reactivities of dibenzothiophenic compounds in a LC-finer LGO and H2S/NH3 inhibition effect. *Fuel*, **2004**, 83, 305-313	7.1	36
529	High quality diesel by hydrotreating of atmospheric gas oil/light cycle oil blends. *Fuel*, **2004**, 83, 1381-1389	7.1	34
528	Inhibition of nitrogen compounds on the hydrodesulfurization of substituted dibenzothiophenes in light cycle oil. **2004**, 85, 1415-1429		68
527	Possible precursors and products of deep hydrodesulfurization of gasoline and distillate fuels III. The thermodynamic properties of 1,2,3,4-tetrahydrodibenzothiophene. **2004**, 36, 497-509		17
526	A model for the hydrogenation of aromatic compounds during gasoil hydroprocessing. **2004**, 59, 5671-5677		7
525	Inhibition effects observed between dibenzothiophene and carbazole during the hydrotreating process. *Applied Catalysis A: General*, **2004**, 265, 171-183	5.1	40
524	Effect of acridine and of octahydroacridine on the HDS of 4,6-dimethyldibenzothiophene catalyzed by sulfided NiMoP/Al2O3. *Applied Catalysis A: General*, **2004**, 267, 17-25	5.1	23
523	Competitive effects of nitrogen and sulfur content on activity of hydrotreating CoMo/Al2O3 catalysts: a batch reactor study. *Catalysis Today*, **2004**, 98, 67-74	5.3	46

522	On the effect of reaction conditions on liquid phase sulfiding of a NiMo HDS catalyst. *Catalysis Today*, **2004**, 98, 75-81	5.3	30
521	Two stages light gasoil hydrotreating for low sulfur diesel production. *Catalysis Today*, **2004**, 98, 323-332	5.3	6
520	Deep HDS of diesel fuel: chemistry and catalysis. *Catalysis Today*, **2004**, 98, 3-18	5.3	176
519	Desulfurization of Vacuum Gas Oil Based on Chemical Oxidation Followed by Liquid−Liquid Extraction. *Energy & Fuels*, **2004**, 18, 37-40	4.1	53
518	Desulfurization and Denitrogenation of Light Oils by Methyl Viologen-Modified Aluminosilicate Adsorbent. *Energy & Fuels*, **2004**, 18, 1400-1404	4.1	23
517	Modification of Electronic Properties of Mo2C Catalyst by Potassium Doping: Impact on the Reactivity in Hydrodenitrogenation Reaction of Indole. **2004**, 108, 2885-2892		31
516	Ultra-deep Desulfurization of Liquid Hydrocarbon Fuels: Chemistry and Process. **2004**, 1, 167-191		54
515	Activated Carbon-Catalyzed Hydrogenation of Polycyclic Arenes. *Energy & Fuels*, **2004**, 18, 1500-1504	4.1	25
514	Novel Methodology toward Deep Desulfurization of Diesel Feed Based on the Selective Elimination of Nitrogen Compounds. *Industrial & Engineering Chemistry Research*, **2004**, 43, 7843-7849	3.9	59
513	Search for an Efficient 4,6-DMDBT Hydrodesulfurization Catalyst: A Review of Recent Studies. *Energy & Fuels*, **2004**, 18, 1227-1237	4.1	139
512	Two-Stage Hydrotreating of Athabasca Heavy Gas Oil with Interstage Hydrogen Sulfide Removal: Effect of Process Conditions and Kinetic Analyses. *Industrial & Engineering Chemistry Research*, **2004**, 43, 5854-5861	3.9	17
511	Individual Hydrotreating of FCC Feed Components. *Energy & Fuels*, **2004**, 18, 1001-1004	4.1	16
510	Three-Phase Reactor Model to Simulate the Performance of Pilot-Plant and Industrial Trickle-Bed Reactors Sustaining Hydrotreating Reactions. *Industrial & Engineering Chemistry Research*, **2004**, 43, 6654-6669	3.9	74
509	Kinetics of Hydrodesulfurization of Dibenzothiophene Catalyzed by Sulfided CoMo/MCM-41. *Industrial & Engineering Chemistry Research*, **2004**, 43, 2324-2329	3.9	44
508	Hydrotreating Modeling - Helping Refiners to Face Challenges of the Future. **2005**,		
507	Reaction pathways on NiMo/Al2O3 catalysts for hydrodesulfurization of diesel fuel. *Applied Catalysis A: General*, **2005**, 293, 11-23	5.1	34
506	Analysis and removal of heteroatom containing species in coal liquid distillate over NiMo catalysts. *Fuel*, **2005**, 84, 135-142	7.1	27
505	Light straight-run gas oil hydrotreatment over sulfided CoMoP/Al2O3-USY zeolite catalysts. **2005**, 86, 391-405		21

504	Effect of pre-treatment conditions on the performance of sulfided NiMo/Al2O3 catalysts for hydrogenation of linear aldehydes. **2005**, 232, 101-112		15
503	Mechanistic aspects of catalyzed benzothiophene hydrodesulfurization. A density functional theory study. **2005**, 726, 67-80		13
502	Catalytic hydrotreating of heavy gasoil FCC feed over a NiMo/Al2O3-TiO2 catalyst: Effect of hydrogen sulfide on the activity. *Catalysis Today*, **2005**, 107-108, 559-563	5.3	10
501	First principles study of heavy oil organonitrogen adsorption on NiMoS hydrotreating catalysts. *Catalysis Today*, **2005**, 109, 49-53	5.3	29
500	Effect of nitrogen removal from light cycle oil on the hydrodesulphurization of dibenzothiophene, 4-methyldibenzothiophene and 4,6-dimethyldibenzothiophene. *Catalysis Today*, **2005**, 109, 16-23	5.3	46
499	Performance of spent sulfide catalysts in hydrodesulfurization of straight run and nitrogen-removed gas oils. *Applied Catalysis A: General*, **2005**, 280, 133-139	5.1	11
498	Ru, Os and RuOs supported on mesoporous silica doped with zirconium as mild thio-tolerant catalysts in the hydrogenation and hydrogenolysis/hydrocracking of tetralin. *Applied Catalysis A: General*, **2005**, 279, 209-221	5.1	37
497	Effect of S-compounds and CO on hydrogenation of aldehydes over reduced and sulfided NiMo/Al2O3 catalysts. *Applied Catalysis A: General*, **2005**, 286, 111-119	5.1	12
496	Inhibition effect of nitrogen compounds on CoMoP/Al2O3 catalysts with alkali or zeolite added in hydrodesulfurization of dibenzothiophene and 4,6-dimethyldibenzothiophene. *Applied Catalysis A: General*, **2005**, 295, 193-200	5.1	21
495	Pillar effects in MoS2 catalysts supported on Al and Zr pillared clays in a hydrotreatment reaction. **2005**, 240, 48-62		20
494	On the hydrodesulfurization of FCC gasoline: a review. *Applied Catalysis A: General*, **2005**, 278, 143-172	5.1	415
493	Supported (NiMo,CoMo)-carbide, -nitride phases: Effect of atomic ratios and phosphorus concentration on the HDS of thiophene and dibenzothiophene. *Catalysis Today*, **2005**, 109, 33-41	5.3	24
492	A Comparative Study of the HDS Kinetics of Straight Run and Coker Gas Oils Under Deep Desulfurization Conditions. **2005**, 23, 749-760		9
491	Gas-Phase Kinetic Studies of Tetralin Hydrogenation on Pt/Alumina. *Industrial & Engineering Chemistry Research*, **2005**, 44, 7928-7934	3.9	12
490	Maximizing Aromatic Hydrogenation of Bitumen-Derived Light Gas Oil: Statistical Approach and Kinetic Studies. *Energy & Fuels*, **2005**, 19, 1763-1773	4.1	11
489	Characterization of active sites over reduced Ni-Mo/Al(2)O(3) catalysts for hydrogenation of linear aldehydes. **2005**, 109, 1882-90		33
488	Comparative Compositional Analysis of Untreated and Hydrotreated Oil by Electrospray Ionization Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. *Energy & Fuels*, **2005**, 19, 1072-1077	4.1	33
487	Kinetics of Two Pathways for 4,6-Dimethyldibenzothiophene Hydrodesulfurization over NiMo, CoMo Sulfide, and Nickel Phosphide Catalysts. *Energy & Fuels*, **2005**, 19, 353-364	4.1	71

486	Study and modeling of simultaneous hydrodesulfurization, hydrodenitrogenation and hydrodearomatization on vacuum gas oil hydrotreatment. **2005**, 619-624		11
485	Hydrodenitrogenation of Petroleum. **2005**, 47, 297-489		193
484	Experimental and Kinetic Studies of Aromatic Hydrogenation, Hydrodesulfurization, and Hydrodenitrogenation of Light Gas Oils Derived from Athabasca Bitumen. *Industrial & Engineering Chemistry Research*, **2005**, 44, 7935-7944	3.9	20
483	Specific Nitrogen Boiling Point Profiles of Vacuum Gasoils. *Energy & Fuels*, **2005**, 19, 2438-2444	4.1	16
482	Computer-aided modeling for hydrodesulfurization, hydrodenitrogenation and hydrodearomatization simultaneous reactions in a hydrotreating industrial process. **2006**, 651-657		7
481	Distribution of sulfur-containing aromatics between [hmim][Tf2N] and supercritical CO2: a case study for deep desulfurization of oil refinery streams by extraction with ionic liquids. **2006**, 8, 70-77		64
480	Catalytic Hydroprocessing of Coal-Derived Gasification Residues to Fuel Blending Stocks: Effect of Reaction Variables and Catalyst on Hydrodeoxygenation (HDO), Hydrodenitrogenation (HDN), and Hydrodesulfurization (HDS). *Energy & Fuels*, **2006**, 20, 1761-1766	4.1	44
479	Hydrodenitrogenation and Hydrodesulfurization of Heavy Gas Oil Using NiMo/Al2O3 Catalyst Containing Boron: Experimental and Kinetic Studies. *Industrial & Engineering Chemistry Research*, **2006**, 45, 544-552	3.9	35
478	MODELING OF COMPETITIVE ADSORPTION OF NITROGEN SPECIES IN HYDRODESULFURIZATION. **2006**, 193, 460-477		12
477	Hydrodesulfurization & Hydrodenitrogenation. **2006**,		4
476	Gas-Phase Hydrodesulfurization of JP-8 Light Fraction Using Steam Reformate. *Industrial & Engineering Chemistry Research*, **2006**, 45, 7050-7056	3.9	6
475	Comprehensive Compositional Analysis of Hydrotreated and Untreated Nitrogen-Concentrated Fractions from Syncrude Oil by Electron Ionization, Field Desorption Ionization, and Electrospray Ionization Ultrahigh-Resolution FT-ICR Mass Spectrometry. *Energy & Fuels*, **2006**, 20, 1235-1241	4.1	70
474	Nonpolar Compositional Analysis of Vacuum Gas Oil Distillation Fractions by Electron Ionization Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. *Energy & Fuels*, **2006**, 20, 661-667	4.1	51
473	Dual Effect of H2S on Volcano Curves in Hydrotreating Sulfide Catalysis. *Oil and Gas Science and Technology*, **2006**, 61, 515-525	1.9	22
472	Mechanisms of hydrodesulfurization and hydrodenitrogenation. *Catalysis Today*, **2006**, 111, 84-93	5.3	101
471	On novel processes for removing sulphur from refinery streams. *Catalysis Today*, **2006**, 116, 446-460	5.3	269
470	Identification of hydrotreatment-resistant heteroatomic species in a crude oil distillation cut by electrospray ionization FT-ICR mass spectrometry. *Fuel*, **2006**, 85, 2071-2080	7.1	65
469	Effect of H2S partial pressure on the HDS of dibenzothiophene and 4,6-dimethyldibenzothiophene over sulfided NiMoP/Al2O3 and CoMoP/Al2O3 catalysts. *Applied Catalysis A: General*, **2006**, 306, 34-44	5.1	51

468	Autocatalysis-like behavior of hydrogen sulfide on hydrodesulfurization of polyaromatic thiophenes over a synthesized molybdenum sulfide catalyst. *Applied Catalysis A: General*, **2006**, 314, 114-122	5.1	9
467	Catalysts based on Ru/mesoporous phosphate heterostructures (PPH) for hydrotreating of aromatic hydrocarbons. **2006**, 255, 41-48		21
466	Mechanism of the hydrodenitrogenation of neopentylamine and adamantylamine on sulfided NiMo/Al2O3. **2006**, 110, 221-228		1
465	Iminium cations as intermediates in the hydrodenitrogenation of alkylamines over sulfided NiMo/Al2O3. *Catalysis Today*, **2006**, 116, 542-553	5.3	8
464	Preparation of Partially Hydrogenated 4,6-Dimethyldibenzothiophenes. **2006**, 89, 1623-1640		10
463	Hydrogenation of Tetralin over Pt/Al2O3 in Trickle-Bed Reactor in the Presence of Compressed CO2. *Energy & Fuels*, **2006**, 20, 771-777	4.1	15
462	Thermodynamic Aspects of Hydrodesulfurization and Hydrodenitrogenation. **2007**, 25, 841-852		8
461	Thermodynamics of Hydroprocessing Reactions. *Chemical Industries*, **2007**, 51-69		
460	Hydrocarbon Desulfurization to Clean Fuels by Selective Oxidation Versus Conventional Hydrotreating. **2007**, 30, 200-217		25
459	Hydrodesulfurization Activity of MoS2 and Bimetallic Catalysts Prepared by in Situ Decomposition of Thiosalt. *Industrial & Engineering Chemistry Research*, **2007**, 46, 1874-1882	3.9	29
458	Thermodynamic Aspects of Aromatic Hydrogenation. **2007**, 25, 1293-1304		14
457	Influence of Nitrogen-Containing Compounds on the Hydrodesulfurization of 4,6-Dimethyldibenzothiophene over Pt, Pd, and Pt–Pd on Amorphous Silica–Alumina Catalysts. *Industrial & Engineering Chemistry Research*, **2007**, 46, 4124-4133	3.9	7
456	Modeling of trickle bed reactor for hydrotreating of vacuum gas oils: effect of kinetic type on reactor modeling. **2007**, 24, 515-520		5
455	Coke Deposition Profiles during Artificial Aging of Hydroprocessing Catalysts. *Industrial & Engineering Chemistry Research*, **2007**, 46, 421-429	3.9	10
454	Structure–Reactivity–Mechanistic Considerations in Heavy Oil Desulfurization. *Industrial & Engineering Chemistry Research*, **2007**, 46, 8363-8370	3.9	41
453	Mechanistic Kinetic Modeling of the Hydrocracking of Complex Feedstocks, such as Vacuum Gas Oils. *Industrial & Engineering Chemistry Research*, **2007**, 46, 5881-5897	3.9	53
452	Structure and catalytic properties of molybdenum sulfide nanoplatelets. *Applied Catalysis A: General*, **2007**, 328, 88-97	5.1	26
451	Hydrodenitrogenation of indole over Mo2C catalyst: Insights into mechanistic events through DFT modeling. *Catalysis Today*, **2007**, 119, 39-43	5.3	19

450	Hydrogenation of naphthalene on NiMo- and Ni/Al2O3 catalysts: Pre-treatment and deactivation. *Catalysis Today*, **2007**, 128, 63-73	5.3	15
449	Modeling of industrial reactor for hydrotreating of vacuum gas oils. **2007**, 134, 200-208		44
448	Effect of surface Na+ or K+ ion exchange on hydrodesulfurization performance of MCM-41-supported NiMo catalysts. *Applied Catalysis A: General*, **2007**, 316, 134-141	5.1	13
447	A comparative assessment of the effect of H2S on hydrodesulfurization of dibenzothiophene over nanosize MoS2- and CoMo-based Al2O3 catalysts. *Applied Catalysis A: General*, **2007**, 331, 51-59	5.1	12
446	HDS of straight-run gas oil at various nitrogen contents. Comparison between different reaction systems. *Fuel*, **2007**, 86, 1240-1246	7.1	12
445	Heavy oil hydroprocessing over supported NiMo sulfided catalyst: An inhibition effect by added H2S. *Fuel*, **2007**, 86, 1263-1269	7.1	29
444	Estimation of activation energies during hydrodesulfurization of middle distillates. *Fuel*, **2007**, 86, 1247-1253	7.1	18
443	Selective adsorption of refractory sulfur species on active carbons and carbon based CoMo catalyst. **2007**, 307, 1-8		23
442	The hydrogenation and direct desulfurization reaction pathway in thiophene hydrodesulfurization over MoS2 catalysts at realistic conditions: A density functional study. *Journal of Catalysis*, **2007**, 248, 188-203	7.3	228
441	Influence of nitrogen-containing components on the hydrodesulfurization of 4,6-dimethyldibenzothiophene over Pt, Pd, and PtPd on alumina catalysts. *Topics in Catalysis*, **2007**, 46, 65-78	2.3	6
440	Comparison of molybdenum carbide and tungsten carbide for the hydrodesulfurization of dibenzothiophene. *Catalysis Today*, **2007**, 119, 7-12	5.3	36
439	Comparative study of the hydrogenation of tetralin on supported Ni, Pt, and Pd catalysts. *Catalysis Today*, **2007**, 123, 218-223	5.3	41
438	Hydrodesulfurization of 4,6-dimethyldibenzothiophene over Pt, Pd, and PtPd catalysts supported on amorphous silica–alumina. *Catalysis Today*, **2007**, 123, 198-207	5.3	55
437	Synthesis of 4,6-dimethyl-tetrahydro- and hexahydro-dibenzothiophene. **2008**, 49, 2063-2065		8
436	Inhibition of the Hydrogenation and Hydrodesulfurization Reactions by Nitrogen Compounds over NiMo/Al2O3. **2008**, 123, 181-185		43
435	NiMo Supported on Faujasite-modified Al2O3 as Catalysts for the Hydrotreatment of a Light Cycle Oil/Straight Run Gas Oil Mixture. **2008**, 80, 903-910		6
434	Kinetics of Bitumen-Derived Gas Oil Upgrading Using a Commercial NiMo/Al2O3 Catalyst. **2008**, 82, 478-487		18
433	Hydrodenitrogenation and Hydrodesulphurization of Heavy Gas Oil Using NiMo/Al2O3 Catalyst Containing Phosphorus: Experimental and Kinetic Studies. **2008**, 83, 855-864		13

432	Experimental and Kinetics Studies of Aromatic Hydrogenation in a Two-Stage Hydrotreating Process using NiMo/Al2O3 and NiW/Al2O3 Catalysts. **2008**, 84, 572-580		4
431	Hydrodesulfurization of 4,6-dimethyldibenzothiophene over noble metals supported on mesoporous zeolites. **2008**, 47, 8478-81		165
430	Hydrodesulfurization of 4,6-Dimethyldibenzothiophene over Noble Metals Supported on Mesoporous Zeolites. **2008**, 120, 8606-8609		21
429	Novel bifunctional NiMo/Al-SBA-15 catalysts for deep hydrodesulfurization: Effect of support Si/Al ratio. *Applied Catalysis A: General*, **2008**, 335, 159-171	5.1	131
428	Simulation of hydrotreating of light cycle oil with a system dynamics model. *Applied Catalysis A: General*, **2008**, 339, 209-220	5.1	19
427	Hydroprocessing catalysis on metal sulfides prepared from molecular complexes. *Catalysis Today*, **2008**, 130, 206-220	5.3	31
426	A density functional theory study of the hydrodesulfurization reaction of dibenzothiophene to biphenyl on a single-layer NiMoS cluster. *Catalysis Today*, **2008**, 130, 170-177	5.3	43
425	Hydrodesulfurization of 4,6-dimethyldibenzothiophene over Pt supported on Al2O3, SBA-15, and HZSM-5. *Catalysis Today*, **2008**, 130, 249-253	5.3	22
424	Effect of Mo and Co loading in HDS catalysts supported on solvo-thermally treated ZrO2TiO2 mixed oxides. *Catalysis Today*, **2008**, 133-135, 282-291	5.3	23
423	Isomerization and cracking under HDS conditions using alumina modified with boron as catalysts support. *Catalysis Today*, **2008**, 133-135, 255-260	5.3	20
422	The effect of sulfur compound on the hydrogenation of tetralin over a PdPt/HDAY catalyst. **2008**, 140, 424-431		18
421	Thermodynamic analysis of a reactive distillation process for deep hydrodesulfurization of diesel: Effect of the solvent and operating conditions. **2008**, 143, 210-219		12
420	Benzene hydrogenation over Ni/Al2O3 catalysts prepared by conventional and solgel techniques. **2008**, 79, 199-207		93
419	Effect of organosulphur, organonitrogen and organooxygen compounds on the hydrodechlorination of tetrachloroethylene over Pd/Al2O3. **2008**, 82, 264-272		7
418	Computer aided kinetic modeling with KMT and KME. **2008**, 89, 350-363		43
417	Proton affinity of S-containing aromatic compounds: Implications for crude oil hydrodesulfurization. **2008**, 281, 79-84		27
416	Arene Binding Affinities in [CpRu(-arene)]+ Complexes: Models for the Adsorption of Arenes on Hydrodesulfurization Catalysts. **2008**, 27, 1098-1105		17
415	In situ FT-IR spectroscopy investigations of carbon nanotubes supported Co-Mo catalysts for selective hydrodesulfurization of FCC gasoline. **2008**, 17, 165-170		11

414	Hydrodeoxygenation of Phenolic Model Compounds over MoS2 Catalysts with Different Structures. **2008**, 16, 733-739		46
413	Kinetic Modeling of Large-Scale Reaction Systems. **2008**, 50, 287-378		43
412	High Quality Diesel by Hydrotreating Gas Oil over Modified Titania-supported NiMo Catalysts. **2008** , 30, 698-722		4
411	Selective extraction of neutral nitrogen compounds found in diesel feed by 1-butyl-3-methyl-imidazolium chloride. **2008**, 10, 524		77
410	Extractive Desulfurization Using Fe-Containing Ionic Liquids. *Energy & Fuels*, **2008**, 22, 1687-1690	4.1	159
409	Effects of Nitrogen and Aromatics on Hydrodesulfurization of Light Cycle Oil Predicted by a System Dynamics Model. *Energy & Fuels*, **2008**, 22, 860-866	4.1	15
408	Hydrotreating. **2008**, 2695		4
407	Unraveling heavy oil desulfurization chemistry: targeting clean fuels. **2008**, 42, 1944-7		52
406	Structure sensitivity of carbon-nitrogen ring opening: impact of platinum particle size from below 1 to 5 nm upon pyrrole hydrogenation product selectivity over monodisperse platinum nanoparticles loaded onto mesoporous silica. **2008**, 130, 14026-7		193
405	Substituent Effects. **2008**, 1561		
404	On the continuum approximation of large reaction mixtures. **2009**, 56, 1894-1906		5
403	Highly Selective Catalytic Conversion of Phenolic Bio-Oil to Alkanes. **2009**, 121, 4047-4050		144
402	Highly selective catalytic conversion of phenolic bio-oil to alkanes. **2009**, 48, 3987-90		529
401	SBA-15 modified with Al, Ti, or Zr as supports for highly active NiW catalysts for HDS. **2009**, 44, 6617-6628		44
400	Adsorptive desulfurization by activated alumina. **2009**, 170, 1133-40		204
399	Revisiting dibenzothiophene thermochemical data: Experimental and computational studies. **2009**, 41, 1199-1205		32
398	Correlation of the deactivation of CoMo/Al2O3 in hydrodesulfurization with surface carbon species. **2009**, 86, 176-181		18
397	Impact of Oxygenated Compounds from Lignocellulosic Biomass Pyrolysis Oils on Gas Oil Hydrotreatment. *Energy & Fuels*, **2009**, 23, 1007-1014	4.1	87

396	Kinetic Study of the HDS of 4,6-DMDBT over NiMo/Al2O3–SiO2(x) Catalysts. *Industrial & Engineering Chemistry Research*, **2009**, 48, 1178-1185	3.9	15
395	Effect of Hydrogen Purity on Hydroprocessing of Heavy Gas Oil Derived from Oil-Sands Bitumen. *Energy & Fuels*, **2009**, 23, 2129-2135	4.1	15
394	Role of the Ru and Support in Sulfided RuNiMo Catalysts in Simultaneous Hydrodearomatization (HDA), Hydrodesulfurization (HDS), and Hydrodenitrogenation (HDN) Reactions. *Energy & Fuels* , **2009**, 23, 1364-1372	4.1	15
393	Influence of Templates on the Overgrowth of MCM-41 over HY and the Hydrodesulfurization Performances of the Supported NiMo Catalysts. *Industrial & Engineering Chemistry Research*, **2009**, 48, 2870-2877	3.9	14
392	Modification of Activity and Selectivity of NiMo/SBA-15 HDS Catalysts by Grafting of Different Metal Oxides on the Support Surface. *Industrial & Engineering Chemistry Research*, **2009**, 48, 1126-1133	3.9	56
391	Hydroprocessing Euro 4-Type Diesel from High-Temperature Fischer–Tropsch Vacuum Gas Oils. *Energy & Fuels*, **2009**, 23, 38-45	4.1	21
390	Structure Effects on Pyridine Hydrogenation over Pt(111) and Pt(100) Studied with Sum Frequency Generation Vibrational Spectroscopy. **2010**, 137, 118-122		16
389	Kinetic study and H2S effect on refractory DBTs desulfurization in a heavy gasoil. *Journal of Catalysis*, **2010**, 269, 169-178	7.3	37
388	Simulation of hydrodesulfurization using artificial neural network. **2010**, 88, n/a-n/a		2
387	CoMo/Al2O3 VERSUS NiMo/Al2O3 SULPHIDE CATALYSTS : SENSITIVITY TO REACTION CONDITIONS FOR HDS AND HYDROGENATION. **2010**, 104, 189-195		10
386	EFFECT OF THE H2S AND H2 PARTIAL PRESSURE ON THE HYDRODENITROGENATION (HDN) OF ANILINE AND INDOLE OVER A NiMoP-AL2O3 CATALYST. **2010**, 104, 245-251		14
385	Organometallic Complexes as Models for the Adsorption of Thiophenes on Hydrodesulfurization (HDS) Catalysts. **2010**, 104, 265-282		75
384	Primary carbon-nitrogen bond scission and methyl dehydrogenation across a W-W multiple bond. **2010**, 49, 9711-4		8
383	Inhibiting effect of oxygenated model compounds on the HDS of dibenzothiophenes over CoMoP/Al2O3 catalyst. *Applied Catalysis A: General*, **2010**, 383, 14-23	5.1	27
382	Molecular energetics of 4-methyldibenzothiophene: An experimental study. **2010**, 42, 251-255		18
381	Effects of the operating variables on hydrotreating of heavy gas oil: Experimental, modeling, and kinetic studies. *Fuel*, **2010**, 89, 2536-2543	7.1	30
380	Hydrodenitrogenation property–reactivity correlation. *Applied Catalysis A: General*, **2010**, 378, 52-58	5.1	20
379	Oxidation of dibenzothiophene with cumene hydroperoxide on MoO3/SiO2 modified with alkaline earth metals. *Catalysis Today*, **2010**, 149, 122-126	5.3	49

378	Effect of the nitrogen heterocyclic compounds on hydrodesulfurization using in situ hydrogen and a dispersed Mo catalyst. *Catalysis Today*, **2010**, 149, 28-34	5.3	30
377	Recent advances in the science and technology of ultra low sulfur diesel (ULSD) production. *Catalysis Today*, **2010**, 153, 1-68	5.3	909
376	Extractive desulfurization of fuel oils with low-viscosity dicyanamide-based ionic liquids. **2010**, 12, 2030		113
375	Kinetics and Modeling of Petroleum Residues Hydroprocessing. **2010**, 52, 204-324		37
374	Characterization and Identification of the most Refractory Nitrogen Compounds in Hydroprocessed Vacuum Gas Oil. *Industrial & Engineering Chemistry Research*, **2010**, 49, 3184-3193	3.9	32
373	Study of the Surface Chemical Reactions of Thiophene with Ag/Titania by the Complementary Temperature-Programmed Electron Spin Resonance, Temperature-Programmed Desorption, and X-ray Photoelectron Spectroscopy: Adsorption, Desorption, and Sorbent Regeneration Mechanisms. **2010**, 114, 4075-4085		20
372	Catalytically Active Sites of Supported Pt Catalysts for Hydrogenation of Tetralin in the Presence of Dibenzothiophene and Quinoline. **2010**, 114, 14532-14541		11
371	Assessment of Selected Apparent Kinetic Parameters of the HDM and HDS Reactions of Two Kuwaiti Residual Oils, Using Two Types of Commercial ARDS Catalysts. *Energy & Fuels*, **2010**, 24, 1495-1501	4.1	11
370	Deep desulfurization of diesel fuel using ionic liquids: current status and future challenges. **2010**, 12, 1139		360
369	The catalytic valorization of lignin for the production of renewable chemicals. **2010**, 110, 3552-99		3089
368	Primary Carbon?Nitrogen Bond Scission and Methyl Dehydrogenation across a W?W Multiple Bond. **2010**, 122, 9905-9908		2
367	Effects of Hydrogen Partial Pressure on Hydrotreating of Heavy Gas Oil Derived from Oil-Sands Bitumen: Experimental and Kinetics. *Energy & Fuels*, **2010**, 24, 772-784	4.1	18
366	Analysis and Comparison of Nitrogen Compounds in Different Liquid Hydrocarbon Streams Derived from Petroleum and Coal. *Energy & Fuels*, **2010**, 24, 5539-5547	4.1	56
365	Retracted article: Towards near zero-sulfur liquid fuels: a perspective review. **2011**, 1, 23		205
364	Extractive denitrogenation of fuel oils with dicyanamide-based ionic liquids. **2011**, 13, 3300		63
363	Synthesis and characterization of new polysubstituted pyridinium-based ionic liquids: application as solvents on desulfurization of fuel oils. **2011**, 13, 2768		47
362	Deep Desulfurization of Fuel Oils Using Low-Viscosity 1-Ethyl-3-methylimidazolium Dicyanamide Ionic Liquid. *Industrial & Engineering Chemistry Research*, **2011**, 50, 2236-2244	3.9	83
361	Extraordinarily high activity in the hydrodesulfurization of 4,6-dimethyldibenzothiophene over Pd supported on mesoporous zeolite Y. **2011**, 133, 15346-9		164

360	Modeling of Catalytic Hydrotreating. **2011**, 211-312		2
359	Hydrodesulfurization & Hydrodenitrogenation. **2011**,		
358	Deep Oxidative Desulfurization of Diesel Fuels by Acidic Ionic Liquids. *Industrial & Engineering Chemistry Research*, **2011**, 50, 11690-11697	3.9	69
357	Hydrodeoxygenation of phenols as lignin models under acid-free conditions with carbon-supported platinum catalysts. **2011**, 47, 12209-11		117
356	Conversion of Anisole Catalyzed by Platinum Supported on Alumina: The Reaction Network. *Energy & Fuels*, **2011**, 25, 4776-4785	4.1	64
355	Deactivation Modes of Solid Catalysts with Different Active Sites. **2011**, 32, 51-59		10
354	4,6-Dimethyl-dibenzothiophene conversion over Al2O3□TiO2-supported noble metal catalysts. **2011**, 126, 237-247		22
353	Aqueous-phase hydrodeoxygenation of bio-derived phenols to cycloalkanes. *Journal of Catalysis*, **2011**, 280, 8-16	7.3	426
352	Bifunctional transalkylation and hydrodeoxygenation of anisole over a Pt/HBeta catalyst. *Journal of Catalysis*, **2011**, 281, 21-29	7.3	396
351	Inhibition of the hydrogenation of tetralin by nitrogen and sulfur compounds over Ir/SBA-16. *Applied Catalysis A: General*, **2011**, 404, 30-30	5.1	4
350	Experimental study on two-stage catalytic hydroprocessing of middle-temperature coal tar to clean liquid fuels. *Fuel*, **2011**, 90, 3404-3409	7.1	75
349	Mechanism and Site Requirements of Thiophene Hydrodesulfurization Catalyzed by Supported Pt Clusters. **2011**, 3, 1166-1175		33
348	Hydrodesulfurization of Dibenzothiophene and its Hydrogenated Intermediates Over Bulk Ni2P. *Topics in Catalysis*, **2011**, 54, 290-298	2.3	18
347	Nitrogen Tolerant Hydrodesulfurization Catalysts Based on Rh and Ru Promoted Mo/Al2O3. *Topics in Catalysis*, **2011**, 54, 1325-1330	2.3	3
346	Hydrotreating of light gas oil using carbon nanotube supported NiMoS catalysts: Kinetic modelling. **2011**, 89, 562-575		7
345	Rare-earth metal allyl and hydrido complexes supported by an (NNNN)-type macrocyclic ligand: synthesis, structure, and reactivity toward biomass-derived furanics. **2011**, 17, 15014-26		42
344	Catalyst development for ultra-deep hydrodesulfurization (HDS) of dibenzothiophenes. I: Effects of Ni promotion in molybdenum-based catalysts. *Catalysis Today*, **2011**, 164, 538-543	5.3	33
343	Kinetic parameter estimation and simulation of trickle-bed reactor for hydrodesulfurization of crude oil. **2011**, 66, 859-871		74

342	Integrated design of diesel hydrotreating processes. **2011**, 89, 1025-1036		25
341	Renewable fuels via catalytic hydrodeoxygenation. *Applied Catalysis A: General*, **2011**, 397, 1-12	5.1	330
340	Enhanced oxidative desulfurization of model fuels using a film-shear reactor. *Fuel*, **2011**, 90, 898-901	7.1	8
339	Diesel production in coal-based high-temperature Fischer□Tropsch plants using fixed bed dry bottom gasification technology. **2011**, 92, 959-969		17
338	Distillate Hydrotreating to Ultra-low-sulfur Diesel □the Impact of Aromatics. **2011**, 53, 152-169		2
337	Mapas de Curvas Residuales para Procesos de Destilaci□ Reactiva Multicomponente. **2012**, 23, 121-128		
336	Hydrodeoxygenation of model compounds and catalytic systems for pyrolysis bio-oils upgrading. **2012**, 1,		61
335	Dihydrogen catalysis: a degradation mechanism for N2-fixation intermediates. **2012**, 116, 11618-42		15
334	Kinetics of HDS and of the inhibitory effect of quinoline on HDS of 4,6-DMDBT over a Ni□Mo□P/Al2O3 catalyst: Part I. **2012**, 210, 53-62		32
333	Comparison of kinetics, activity and stability of Ni/HZSM-5 and Ni/Al2O3-HZSM-5 for phenol hydrodeoxygenation. *Journal of Catalysis*, **2012**, 296, 12-23	7.3	178
332	A Study on the Lumping Kinetic Model for a Residual Oil Hydrodesulfurization Process. **2012**, 34, 1933-1942		1
331	Adsorptive Denitrogenation and Desulfurization of Diesel Fractions by Mesoporous SBA15-Supported Nickel(II) Phosphide Synthesized through a Novel Approach of Urea Matrix Combustion. *Industrial & Engineering Chemistry Research*, **2012**, 51, 14503-14510	3.9	32
330	Hydrodesulfurization of Dibenzothiophene over MCM-41-Supported Pd and Pt Catalysts. *Energy & Fuels*, **2012**, 26, 4671-4679	4.1	10
329	Effect of Pressure on the Hydrocracking of Light Cycle Oil with a Pt□Pd/HY Catalyst. *Energy & Fuels*, **2012**, 26, 5897-5904	4.1	20
328	Extension of the Single-Event Microkinetic Model to Alkyl Substituted Monoaromatics Hydrogenation on a Pt Catalyst. **2012**, 2, 1305-1318		15
327	Study of hydrodesulfurization of 4,6-DM-DBT over Pd supported on mesoporous USY zeolite. *Applied Catalysis A: General*, **2012**, 433-434, 251-257	5.1	35
326	Beneficial influence of EDTA on the structure and catalytic properties of sulfided NiMo/SBA-15 catalysts for hydrotreating of light gas oil. **2012**, 125, 67-84		98
325	Unsupported MoS2 and CoMoS2 catalysts for hydrodeoxygenation of phenol. **2012**, 79, 1-7		95

324	Synthesis, characterization and catalytic activity during hydrodesulphurization of dibenzothiophene of NiMoW catalysts supported on AlTi mixed oxides modified with MgO. *Fuel*, **2012**, 100, 57-65	7.1	12
323	Modeling the performance of a bench-scale reactor sustaining HDS and HDM of heavy crude oil at moderate conditions. *Fuel*, **2012**, 100, 152-162	7.1	15
322	Aromaticity of five- and six-membered heterocycles present in crude oils An electronic description for hydrotreatment process. *Fuel*, **2012**, 100, 177-185	7.1	14
321	An evaluation of desulfurization technologies for sulfur removal from liquid fuels. **2012**, 2, 759-783		551
320	A Monte Carlo modeling methodology for the simulation of hydrotreating processes. **2012**, 207-208, 94-102		39
319	Recent advances of sodium borohydride reduction in coal water slurry desulfurization: integration of chemical and electrochemical reduction. **2012**, 2, 8867		30
318	Modeling of a three-phase reactor for bitumen-derived gas oil hydrotreating. **2012**, 29, 135-146		9
317	Reaction mechanism of hydrogenation and direct desulfurization routes of dibenzothiophene-like compounds: A density functional theory study. **2012**, 112, 3599-3605		15
316	Conversion of lignocellulose into renewable chemicals by heterogeneous catalysis. **2012**, 2, 869		165
315	Bimetallic catalysts for upgrading of biomass to fuels and chemicals. **2012**, 41, 8075-98		934
314	Production of Gasoline and Diesel from Coal Tar via Its Catalytic Hydrogenation in Serial Fixed Beds. *Energy & Fuels*, **2012**, 26, 3604-3611	4.1	77
313	Detailed characterization of coal-derived liquids from direct coal liquefaction on supported catalysts. *Fuel*, **2012**, 95, 79-87	7.1	40
312	Reactivity characteristics of Pt-encapsulated zeolite catalysts for hydrogenation and hydrodesulfurization. *Applied Catalysis A: General*, **2012**, 415-416, 70-79	5.1	18
311	Effect of TiO2 on the hydrodesulfurization performance of bulk Ni2P. *Applied Catalysis A: General*, **2012**, 417-418, 19-25	5.1	16
310	Microspectroscopic insight into the deactivation process of individual cracking catalyst particles with basic sulfur components. *Applied Catalysis A: General*, **2012**, 419-420, 84-94	5.1	32
309	Active species of copper chromite catalyst in CO hydrogenolysis of 5-methylfurfuryl alcohol. *Journal of Catalysis*, **2012**, 285, 235-241	7.3	123
308	Hydrodesulfurization of dibenzothiophene and its hydrogenated intermediates over bulk MoP. *Journal of Catalysis*, **2012**, 287, 161-169	7.3	106
307	A comparative kinetic study on ultra-deep hydrodesulfurization of pre-treated gas oil over nanosized MoS2, CoMo-sulfide, and commercial CoMo/Al2O3 catalysts. **2012**, 372, 121-9		14

306	Conversion of 4-Methylanisole Catalyzed by Pt/ÐAl2O3 and by Pt/SiO2-Al2O3: Reaction Networks and Evidence of Oxygen Removal. **2012**, 142, 7-15		37
305	Optimization of hydrodesulfurization activity in the hydrotreating process: canonical analysis and the combined application of factorial design and response surface methodology. *Reaction Kinetics, Mechanisms and Catalysis*, **2013**, 108, 371-390	1.6	11
304	Hydrotreating: Removal of Sulfur from Crude Oil Fractions with Sulfide Catalysts. **2013**, 287-321		6
303	Topological and Electronic Structure of Heterocyclic Compounds Adsorbed on Hydrotreating Catalysts. **2013**, 143, 1354-1361		5
302	Hydroprocessing of heavy gas oils using FeW/SBA-15 catalysts: Experimentals, optimization of metals loading, and kinetics study. *Catalysis Today*, **2013**, 207, 101-111	5.3	16
301	Dipalladium(I) terphenyl diphosphine complexes as models for two-site adsorption and activation of organic molecules. **2013**, 135, 15830-40		49
300	Ultrasound field distribution and ultrasonic oxidation desulfurization efficiency. **2013**, 20, 696-702		17
299	Denitrogenation of middle distillates using adsorbent materials towards ULSD production: A review. **2013**, 106, 21-32		103
298	XAS study of Ni2P/MCM-41 prepared by hydrogen plasma reduction. *Catalysis Today*, **2013**, 211, 126-130	5.3	8
297	Rational preparation of dibenzothiophene-imprinted polymers by surface imprinting technique combined with atom transfer radical polymerization. **2013**, 282, 809-819		22
296	Process Systems Engineering, 4. Process and Product Synthesis, Design, and Analysis. **2013**,		2
295	Different role of H2S and dibenzothiophene in the incorporation of sulfur in the surface of bulk MoP during hydrodesulfurization. *Journal of Catalysis*, **2013**, 300, 197-200	7.3	38
294	Synthesis, characterization and evaluation of unsupported porous NiS2 sub-micrometer spheres as a potential hydrodesulfurization catalyst. *Applied Catalysis A: General*, **2013**, 450, 230-236	5.1	24
293	Preparation of High-Performance Adsorbent from Coal for Adsorptive Denitrogenation of Liquid Hydrocarbon Streams. *Energy & Fuels*, **2013**, 27, 1337-1346	4.1	6
292	Identification of ion series using ion mobility mass spectrometry: the example of alkyl-benzothiophene and alkyl-dibenzothiophene ions in diesel fuels. **2013**, 85, 5530-4		20
291	Transformation of Nitrogen Compounds in Deasphalted Oil Hydrotreating: Characterized by Electrospray Ionization Fourier Transform-Ion Cyclotron Resonance Mass Spectrometry. *Energy & Fuels*, **2013**, 27, 2952-2959	4.1	51
290	Hydrodeoxygenation of Phenol and Derivatives over an Ionic Liquid-Like Copolymer Stabilized Nanocatalyst in Aqueous Media. **2013**, 5, 1598-1605		25
289	Well-ordered transition metal oxide layers in model catalysis--a series of case studies. **2013**, 113, 3986-4034		164

288	Catalyst Performance Testing in Multiphase Systems: Implications of Using Small Catalyst Particles in Hydrodesulfurization. *Industrial & Engineering Chemistry Research*, **2013**, 52, 9069-9085	3.9	30
287	Mechanism for catalytic hydrodenitrogenation of isoquinoline. **2013**, 106, 661-665		21
286	Citric acid loading for MoS2-based catalysts supported on SBA-15. New catalytic materials with high hydrogenolysis ability in hydrodesulfurization. **2013**, 129, 137-145		83
285	Analysis of the Nitrogen Content of Distillate Cut Gas Oils and Treated Heavy Gas Oils Using Normal Phase HPLC, Fraction Collection and Petroleomic FT-ICR MS Data. *Energy & Fuels*, **2013**, 27, 35-45	4.1	14
284	Molecule-based kinetic modeling by Monte Carlo methods for heavy petroleum conversion. **2013**, 56, 1608-1622		16
283	Compositional Analysis of Oil Residues by Ultrahigh-Resolution Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. *Energy & Fuels*, **2013**, 27, 2002-2009	4.1	25
282	Hydrogenation of Tetralin over Supported Ni and Ir Catalysts. **2013**, 2013, 1-6		9
281	Modeling of Catalytic Hydroprocessing. *Chemical Industries*, **2013**, 203-270		
280	Hydrodenitrogenation of Pyrrole over Silica-supported Ruthenium Phosphide Catalyst. *Journal of the Japan Petroleum Institute*, **2013**, 56, 94-101	1	4
279	Function of Metals and Supports on the Hydrodeoxygenation of Phenolic Compounds. **2014**, 79, 1573-1583		36
278	Competitive hydrodesulfurization of dibenzothiophene and hydrodenitrogenation of quinoline over unsupported MoS2 catalyst. *Applied Catalysis A: General*, **2014**, 469, 173-182	5.1	24
277	Simulating vacuum residue hydroconversion by means of Monte-Carlo techniques. *Catalysis Today*, **2014**, 220-222, 208-220	5.3	35
276	Comparison of nitrogen tolerance of PdMo/Al2O3 and CoMo/Al2O3 catalysts in hydrodesulfurization of model compounds. *Fuel*, **2014**, 120, 86-90	7.1	7
275	Dispersion effects of Ni2P catalysts on hydrotreating of light cycle oil. **2014**, 150-151, 647-655		42
274	Fuels from Crude Oil (Petroleum). **2014**, 48-120		1
273	Molecular Simulation Assisted Design and Preparation of Magnetic Molecularly Imprinted Polymers and Their Characteristics. **2014**, 42, 249-257		5
272	Mild hydrotreatment of low temperature coal tar distillate: Product composition. **2014**, 236, 529-537		47
271	Hydrodeoxygenation of Guaiacol over Ru(0001): A DFT Study. **2014**, 4, 4178-4188		83

270	Modeling a Catalytic Reactor for Hydrotreating of Straight-Run Gas Oil Blended with Fluid Catalytic Cracking Naphtha and Light Cycle Oil: Influence of Vapor□Liquid Equilibrium. *Industrial & Engineering Chemistry Research*, **2014**, 53, 19104-19116	3.9	5
269	Intensification of Deep Hydrodesulfurization Through a Two-stage Combination of Monolith and Trickle Bed Reactors. **2014**, 22, 888-897		9
268	Selective continuous flow extractive denitrogenation of oil containing S- and N-heteroaromatics using metal-containing ionic liquids supported on monolithic silica with hierarchical porosity. **2014**, 4, 1045-1054		16
267	Dihydrogen Catalysis: A Remarkable Avenue in the Reactivity of Molecular Hydrogen. **2014**, 56, 403-475		12
266	Hydrodesulfurization enhancement of heavy and light S-hydrocarbons on NiMo/HMS catalysts modified with Al and P. *Applied Catalysis A: General*, **2014**, 484, 108-121	5.1	30
265	Pyrrolic Ring Opening and Nitrogen Removal from Solution without Hydrogenation: Natural Chabazite as a Cracking Catalyst. *Energy & Fuels*, **2014**, 28, 6570-6578	4.1	4
264	Kinetics and mechanism of m-cresol hydrodeoxygenation on a Pt/SiO2 catalyst. *Journal of Catalysis*, **2014**, 317, 22-29	7.3	128
263	Hydrodesulfurization of 4,6-dimethyldibenzothiophene and its hydrogenated intermediates over bulk Ni2P. *Journal of Catalysis*, **2014**, 317, 144-152	7.3	34
262	CoMo/SBA-15 catalysts prepared with EDTA and citric acid and their performance in hydrodesulfurization of dibenzothiophene. **2014**, 147, 879-887		107
261	Effect of nitrogen compounds in the hydrodesulfurization of straight-run gas oil using a CoMoP/g-Al2O3 catalyst. *Fuel*, **2014**, 138, 98-103	7.1	21
260	Structure-reactivity relationship in catalytic hydrogenation of heterocyclic compounds over ruthenium black-Part A: Effect of substitution of pyrrole ring and side chain in N-heterocycles. **2014** , 160-161, 22-34		22
259	Two [1,2,4-(Me3C)3C5H2]2CeH molecules are involved in hydrogenation of pyridine to piperidine as shown by experiments and computations. *Inorganic Chemistry*, **2014**, 53, 6361-73	5.1	18
258	Atomic level characterization and sulfur resistance of unsupported W2C during dibenzothiophene hydrodesulfurization. Classical kinetic simulation of the reaction. **2014**, 144, 750-759		14
257	A solution-phase synthesis of supported Ni2P catalysts with high activity for hydrodesulfurization of dibenzothiophene. **2014**, 385, 149-159		23
256	Effect of the divalent metal and the activation temperature of NiMoW and CoMoW on the dibenzothiophene hydrodesulfurization reaction. **2014**, 148-149, 221-230		56
255	Upgrading of lignin-derived bio-oils by catalytic hydrodeoxygenation. **2014**, 7, 103-129		627
254	Hydrodeoxygenation of acetone□furfural condensation adducts over alumina-supported noble metal catalysts. **2014**, 160-161, 436-444		42
253	Supported on alumina Co-Mo hydrotreating catalysts: Dependence of catalytic and strength characteristics on the initial AlOOH particle morphology. *Catalysis Today*, **2014**, 220-222, 66-77	5.3	33

252	Efficient Hydrodeoxygenation of Ketones, Phenols, and Ethers Promoted by Platinum□Heteropolyacid Bifunctional Catalysts. **2014**, 43, 1086-1088		15
251	Adsorption of nitrogen- and sulfur-containing compounds on NiMoS for hydrotreating reactions: A DFT and vdW-corrected study. **2015**, 61, 4036-4050		34
250	Understanding Ni Promotion of MoS2/□Al2O3 and its Implications for the Hydrogenation of Phenanthrene. **2015**, 7, 4118-4130		30
249	Noble Metal Phosphides as New Hydrotreating Catalysts: Highly Active Rhodium Phosphide Catalyst. *Journal of the Japan Petroleum Institute*, **2015**, 58, 20-32	1	11
248	Enhanced oxidative desulfurization in a film-shear reactor. *Fuel*, **2015**, 156, 142-147	7.1	37
247	A simulation of diesel hydrotreating process with real component method. **2015**, 23, 780-788		3
246	Anisole and Guaiacol Hydrodeoxygenation Reaction Pathways over Selected Catalysts. *Energy & Fuels*, **2015**, 29, 909-916	4.1	52
245	Hydrodeoxygenation of lignin-derived phenols into alkanes over carbon nanotube supported Ru catalysts in biphasic systems. **2015**, 17, 1710-1717		85
244	Synthesis and application of functionalized polymers for the removal of nitrogen and sulfur species from gas oil. **2015**, 131, 473-482		9
243	Dealing with uncertainties: Sensitivity analysis of vacuum gas oil hydrotreatment. **2015**, 278, 469-478		9
242	Influence of Na content on behavior of NiMo catalysts supported on titania nanotubes in hydrodesulfurization. *Journal of Catalysis*, **2015**, 329, 457-470	7.3	29
241	Slurry-Phase Batch Microreactor for Hydroconversion Studies. *Energy & Fuels*, **2015**, 29, 5274-5281	4.1	2
240	Optimization of reaction variables and macrokinetics for the hydrodeoxygenation of full range low temperature coal tar. *Reaction Kinetics, Mechanisms and Catalysis*, **2015**, 116, 433-450	1.6	20
239	Influence of Support Acidity of NiMo Sulfide Catalysts for Hydrogenation and Hydrocracking of Tetralin and Its Reaction Intermediates. *Industrial & Engineering Chemistry Research*, **2015**, 54, 2646-2656	3.8	33
238	Catalytic Hydrodenitrogenation of Asphaltene Model Compounds. *Energy & Fuels*, **2015**, 29, 6724-6733	4.1	6
237	Kinetic study of the conversion of 2-methoxyphenol over supported Re catalysts: Sulfide and oxide state. *Applied Catalysis A: General*, **2015**, 505, 302-308	5.1	18
236	Catalytic Transformation of Lignin for the Production of Chemicals and Fuels. **2015**, 115, 11559-624		1600
235	Hydrodesulfurization of dibenzothiophene, 4,6-dimethyldibenzothiophene, and their hydrogenated intermediates over bulk tungsten phosphide. *Journal of Catalysis*, **2015**, 330, 330-343	7.3	62

234	Reactive Adsorption Desulfurization of Hydrotreated Diesel over a Ni/ZnO–Al2O3–SiO2 Adsorbent. *Energy & Fuels*, **2015**, 29, 6057-6067	4.1	15
233	Structure–Activity Correlations in Hydrodesulfurization Reactions over Ni-Promoted MoxW(1−x)S2/Al2O3 Catalysts. **2015**, 5, 7276-7287		78
232	Ni- and Pd/C-catalyzed Hydrodenitrogenation of Isoquinoline. **2015**, 37, 55-60		2
231	Synthesis of ionic liquids and their use for extracting nitrogen compounds from gas oil feeds towards diesel fuel production. **2015**, 130, 38-45		27
230	Synthesis, characterization and catalytic properties of NiMoP/MCM41-Al2O3 catalysts for DBT hydrodesulfurization. *Catalysis Today*, **2015**, 250, 2-11	5.3	19
229	Synthergistic effects of Ni and acid sites for hydrogenation and C–O bond cleavage of substituted phenols. **2015**, 17, 1204-1218		174
228	Influence of the sulfidation temperature in a NiMoW catalyst derived from layered structure (NH4)Ni2OH(H2O)(MoO4)2. *Fuel*, **2015**, 139, 575-583	7.1	20
227	Synthesis, characterization and application of 1-butyl-3-methylimidazolium tetrafluoroborate for extractive desulfurization of liquid fuel. **2016**, 9, 578-587		82
226	Diesel Fuels for Compression Ignition Internal Combustion Engines. **2016**, 1-34		
225	Iridium addition enhances hydrodesulfurization selectivity in 4,6-dimethyldibenzothiophene conversion on palladium. **2016**, 191, 138-146		21
224	HDN of indole over Ir-modified Ti-SBA-15. **2016**, 192, 220-233		23
223	DFT Insights into the Competitive Adsorption of Sulfur- and Nitrogen-Containing Compounds and Hydrocarbons on Co-Promoted Molybdenum Sulfide Catalysts. **2016**, 6, 2904-2917		58
222	Comparison of the metal–organic framework MIL-101 (Cr) versus four commercial adsorbents for nitrogen compounds removal in diesel feedstocks. *Fuel*, **2016**, 180, 284-291	7.1	23
221	Isolation and characterization of new lignin streams derived from extractive-ammonia (EA) pretreatment. **2016**, 18, 4205-4215		57
220	Photo-assisted adsorptive desulfurization of hydrocarbon fuels over TiO2 and Ag/TiO2. *Fuel*, **2016**, 183, 550-556	7.1	30
219	Product compositions from catalytic hydroprocessing of low temperature coal tar distillate over three commercial catalysts. *Reaction Kinetics, Mechanisms and Catalysis*, **2016**, 119, 491-509	1.6	9
218	Extractive denitrogenation of fuel oils using ionic liquids: a review. **2016**, 6, 93932-93946		38
217	Experimental Investigation on Upgrading of Lignin-Derived Bio-Oils: Kinetic Analysis of Anisole Conversion on Sulfided CoMo/Al2O3 Catalyst. *International Journal of Chemical Kinetics*, **2016**, 48, 702-713	1.4	28

216	Deep-desulfurization of the petroleum diesel using the heterogeneous carboxyl functionalized poly-ionic liquid. **2016**, 2, S105-S113		19
215	Adsorptive removal of organic chloride from model jet fuel by Na-LSX zeolite: Kinetic, equilibrium and thermodynamic studies. **2016**, 114, 321-330		9
214	Hydrotreating of oil fractions. **2016**, 295-329		8
213	Effect of Dephenolization on Low-Temperature Coal Tar Hydrogenation To Produce Fuel Oil. *Energy & Fuels*, **2016**, 30, 10215-10221	4.1	20
212	Metal-Organic Frameworks as a Potential Platform for Selective Treatment of Gaseous Sulfur Compounds. **2016**, 8, 29835-29857		55
211	An investigation on the aqueous-phase hydrodeoxygenation of various methoxy-substituted lignin monomers on Pd/C and HZSM-5 catalysts. **2016**, 6, 104398-104406		10
210	Deep oxidative extractive desulfurization of fuels using benzyl-based ionic liquid. **2016**, 62, 4023-4034		23
209	Hydroprocessing of 4-methylanisole as a representative of lignin-derived bio-oils catalyzed by sulphided CoMo/Al2O3: A semi-quantitative reaction network. **2016**, 94, 1524-1532		23
208	CN bond hydrogenolysis of aniline and cyclohexylamine over TaOx/Al2O3. **2016**, 40, 6001-6004		4
207	Catalytic hydroprocessing of microalgae-derived biofuels: a review. **2016**, 18, 3684-3699		109
206	Application of Monte Carlo techniques to LCO gas oil hydrotreating: Molecular reconstruction and kinetic modelling. *Catalysis Today*, **2016**, 271, 188-198	5.3	11
205	Improved syngas processing for enhanced Bio-SNG production: A techno-economic assessment. **2016**, 101, 380-389		39
204	Study for the production of ultra-low sulfur gas oils on a highly loaded NiMoW catalyst. *Catalysis Today*, **2016**, 259, 409-416	5.3	13
203	Mapping reactivities of aromatic models with a lignin disassembly catalyst. Steps toward controlling product selectivity. **2016**, 6, 2984-2994		31
202	Optimization of crude oil hydrotreating process as a function of operating conditions: Application of response surface methodology. **2016**, 89, 158-165		10
201	Substrate induced diastereoselective hydrogenation/reduction of arenes and heteroarenes. **2016**, 6, 18419-18451		22
200	Desulfurization of Model Fuels with Carbon Nanotube/TiO2 Nanomaterial Adsorbents: Comparison of Batch and Film-Shear Reactor Processes. **2016**, 26, 572-578		2
199	Advances in sulfur chemistry for treatment of acid gases. **2016**, 54, 65-92		88

198	Hydrodesulfurization of Dibenzothiophene in a Micro Trickle Bed Catalytic Reactor under Operating Conditions from Reactive Distillation. *International Journal of Chemical Reactor Engineering*, **2016**, 14, 769-783	1.2	4
197	Competitive adsorption of nitrogen and sulphur compounds on a multisite model of NiMoS catalyst: A theoretical study. *Journal of Catalysis*, **2016**, 333, 78-93	7.3	44
196	Performance assessment of NiMo/Al 2 O 3 catalysts for upgrading KEC-AR: An assessment of selected apparent kinetic parameters of selected hydrotreating reactions. *Fuel*, **2016**, 164, 38-45	7.1	3
195	Producing jet fuel from biomass lignin: Potential pathways to alkyl-benzenes and cycloalkanes. **2017**, 72, 673-722		119
194	A potassium tert-butoxide and hydrosilane system for ultra-deep desulfurization of fuels. **2017**, 2,		39
193	Experimental and First-Principles Evidence for Interfacial Activity of Ru/TiO2 for the Direct Conversion of m-Cresol to Toluene. **2017**, 9, 2642-2651		31
192	Adsorptive Removal of Nitrogen, Sulfur, and Aromatic Compounds from Gas Oil by Poly(glycidy methacrylate) Using Two Kinds of Graft Polymerization Methods. *Energy & Fuels*, **2017**, 31, 2430-2438	4.1	2
191	Development of a Structure-Based Lumping Kinetic Model for Light Gas Oil Hydrodesulfurization. *Energy & Fuels*, **2017**, 31, 5673-5681	4.1	17
190	Hydrogenation of aromatics compounds: Calculation of thermodynamic properties using molecular index connectivity. **2017**, 95, 2272-2277		2
189	Impact of Ni promotion on the hydrogenation pathways of phenanthrene on MoS2/Al2O3. *Journal of Catalysis*, **2017**, 352, 171-181	7.3	30
188	Naphthalene hydrogenation over Mg-doped Pt/Al 2 O 3. *Catalysis Today*, **2017**, 296, 197-204	5.3	17
187	Influences of sodium and potassium cations on the hydrodesulfurization performances of Pd and Pt catalysts supported on siliceous MCM-41. *Catalysis Today*, **2017**, 297, 124-130	5.3	8
186	Fluid dynamics and reaction assessment of diesel oil hydrotreating reactors via CFD. **2017**, 166, 17-29		11
185	The hydrodeoxygenation, hydrogenation, hydrodealkylation and ring-opening reaction in the hydrotreating of low temperature coal tar over NiMo/Al2O3 catalyst. *Reaction Kinetics, Mechanisms and Catalysis*, **2017**, 121, 487-503	1.6	12
184	Hydroprocessing of Low-Temperature Coal Tar for the Production of Clean Fuel over Fluorinated NiW/Al2O3SiO2 Catalyst. *Energy & Fuels*, **2017**, 31, 3768-3783	4.1	36
183	Hydrodesulfurization Kinetics of Middle Distillates: A Four-Lumping Model with Consideration of Nitrogen and Aromatics Inhibitions. *Energy & Fuels*, **2017**, 31, 831-838	4.1	10
182	On the Preferred Active Sites of Promoted MoS2 for Hydrodesulfurization with Minimal Organonitrogen Inhibition. **2017**, 7, 501-509		53
181	Rationally Positioning Zirconium on Supported Ru Catalyst for Synergistically Catalytic Upgrading Bio-oil. *Industrial & Engineering Chemistry Research*, **2017**, 56, 13566-13571	3.9	1

180	Characterization of Heteroatom-Containing Compounds in Thermally Cracked Naphtha from Oilsands Bitumen. *Energy & Fuels*, **2017**, 31, 9247-9254	4.1	8
179	Modeling, simulation and kinetic parameter estimation for diesel hydrotreating. *Fuel*, **2017**, 209, 184-193	4.1	24
178	Production of Clean Fuels by Catalytic Hydrotreating a Low Temperature Coal Tar Distillate in a Pilot-Scale Reactor. *Energy & Fuels*, **2017**, 31, 11495-11508	4.1	24
177	Change of Hydrocarbon Structure Type in Lube Hydroprocessing and Correlation Model for Viscosity Index. *Industrial & Engineering Chemistry Research*, **2017**, 56, 8016-8028	3.9	7
176	A framework for developing a structure-based lumping kinetic model for the design and simulation of refinery reactors. **2017**, 106, 385-395		3
175	Properties, environmental fate and biodegradation of carbazole. **2017**, 7, 111		12
174	Inhibiting effects of nitrogen compounds on deep hydrodesulfurization of straight-run gas oil over a NiW/Al2O3 catalyst. *Fuel*, **2017**, 188, 401-407	7.1	27
173	Hydrogenation of tetralin in presence of nitrogen using a noble-bimetallic couple over a Ti-modified SBA-15. *Catalysis Today*, **2017**, 282, 111-122	5.3	15
172	Hydrotreating and hydrothermal treatment of alkaline lignin as technological valorization options for future biorefinery concepts: a review. **2017**, 92, 257-270		16
171	Implementation of a quantum cascade laser-based gas sensor prototype for sub-ppmv HS measurements in a petrochemical process gas stream. **2017**, 409, 729-739		30
170	Bifunctional Ni-ZSM-5 Catalysts for the Pyrolysis and Hydropyrolysis of Biomass. **2017**, 5, 172-182		30
169	Extractive Denitrogenation of Fuel Oils with Ionic Liquids: A Systematic Study. *Energy & Fuels*, **2017**, 31, 2183-2189	4.1	20
168	Removal of sulphur from model gasoline by CuAgY zeolite: equilibrium, thermodynamics and kinetics. **2017**, 7, 51528-51537		6
167	Modern Approaches to Hydrotreating Catalysis. *Springer Handbooks*, **2017**, 675-712	1.3	3
166	Kinetic Studies of Hydrodesulphurization of Dibenzothiophen on a Ni2P/MCM-41 Catalyst. **2017**, 90, 1883-1891		
165	Hydrodesulfurization, Hydrodenitrogenation and Hydrodearomatization over CoMo/SAPO-11-Al2O3 Catalysts. *Journal of the Japan Petroleum Institute*, **2017**, 60, 301-310	1	6
164	Experimental and Modeling Study of Organic Chloride Compounds Removal from Naphtha Fraction of Contaminated Crude Oil Using Sintered Al2O3 Nanoparticles: Equilibrium, Kinetic, and Thermodynamic Analysis. *Energy & Fuels*, **2018**, 32, 4025-4039	4.1	6
163	Unravelling the chemical reactions of fatty acids and triacylglycerides under hydrodeoxygenation conditions based on a comprehensive thermodynamic analysis. **2018**, 112, 37-44		15

162	Pilot-scale evaluation of hydrotreating inferior coker gas oil prior to its fluid catalytic cracking. *Fuel*, **2018**, 226, 27-34	7.1	8
161	Effect of TiO2 Coating on Morphology of Active Phase on Sulfided CoMo/Al2O3 Hydrotreating Catalysts. *Energy & Fuels*, **2018**, 32, 1665-1673	4.1	12
160	Detoxification of Crude Oil. **2018**, 173-194		
159	Catalytic upgrading of bio-oil produced from hydrothermal liquefaction of Nannochloropsis sp. **2018**, 252, 28-36		47
158	Sulfur and Total Carboxylic Acid Number Determination in Vacuum Gas Oil by Attenuated Total Reflectance Fourier Transform Infrared Spectroscopy. *Energy & Fuels*, **2018**, 32, 2128-2136	4.1	3
157	Ambient Pressure Hydrodesulfurization of Refractory Sulfur Compounds in Highly Sensitive Reactor Platform Coupled to a Time-of-Flight Mass Spectrometer. **2018**, 122, 1699-1705		4
156	Deep oxidative desulfurization with simultaneous oxidative denitrogenation of diesel fuel and straight run gas oil. **2018**, 236, 326-337		45
155	Remarkable adsorptive removal of nitrogen-containing compounds from hydrotreated fuel by molecularly imprinted poly-2-(1-imidazol-2-yl)-4-phenol nanofibers.. **2018**, 8, 8039-8050		6
154	Combined Hydrotreating and Fluid Catalytic Cracking Processing for the Conversion of Inferior Coker Gas Oil: Effect on Nitrogen Compounds and Condensed Aromatics. *Energy & Fuels*, **2018**, 32, 4979-4987	4.1	12
153	Kinetic Assessment of the Simultaneous Hydrodesulfurization of Dibenzothiophene and the Hydrogenation of Diverse Polyaromatic Structures. **2018**, 8, 3926-3942		27
152	Advances in Nanocatalyzed Hydrodesulfurization of Gasoline and Diesel Fuels. **2018**, 67-96		3
151	Selectivity effects related to the diversity of active sites operating on nanostructured multifunctional catalysts. **2018**, 21, 369-381		
150	A theory of ultradeep hydrodesulfurization of diesel in stacked-bed reactors. **2018**, 64, 595-605		10
149	Thermodynamic analysis of diesel hydrotreating reactions. *Fuel*, **2018**, 214, 314-321	7.1	7
148	Kinetics of thiophene hydrodesulfurization over a supported MoCoNi catalyst. **2018**, 21, 277-287		12
147	Production of High-Density Jet and Diesel Fuels by Hydrogenation of Highly Aromatic Fractions. **2018**, 91, 1223-1254		4
146	Kinetic and Mechanistic Analysis of Dibenzothiophene Hydrodesulfurization on Ti-SBA-15NiMo Catalysts. *Energy & Fuels*, **2018**, 32, 11383-11389	4.1	9
145	Adsorption of Biomass-Derived Products on MoO: Hydrogen Bonding Interactions under the Spotlight. **2018**, 3, 14165-14172		7

144	Cobalt(II)-Mediated Desulfurization of Thiophenes, Sulfides, and Thiols. *Inorganic Chemistry*, **2018**, 57, 11306-11309	5.1	12
143	Hydrotreating Reactivities of Atmospheric Residues and Correlation with Their Composition and Properties. *Energy & Fuels*, **2018**, 32, 6726-6736	4.1	11
142	Guaiacol Hydrogenation in an Aqueous Medium in the Presence of a Palladium Catalyst Supported on a Mesoporous Dendrimer-Containing Polymer. **2018**, 58, 407-411		5
141	Simulation, exergy analysis and optimization of a shale oil hydrogenation process for clean fuels production. **2018**, 140, 102-111		16
140	Evidence of heterogeneous catalytic activity of ZSM-5 in supercritical water for dodecane cracking. *Catalysis Today*, **2018**, 317, 2-11	5.3	14
139	Selective direct desulfurization way (DDS) with CoMoS supported over mesostructured titania for the deep hydrodesulfurization of 4,6-dimethydibenzothiophene. *Applied Catalysis A: General*, **2018**, 563, 91-97	5.1	12
138	Enantioselective Enzymatic Naphthoyl Ring Reduction. **2018**, 24, 12505-12508		11
137	Catalytic hydrogenation of Low temperature coal tar into jet fuel by using two-reactors system. **2018**, 134, 202-208		15
136	Mechanism and site requirements for thiophene hydrodesulfurization on supported Re domains in metal or sulfide form. *Journal of Catalysis*, **2018**, 368, 411-426	7.3	14
135	Molecular-Level Kinetic Modeling of Lube Base Oil Hydroisomerization. *Energy & Fuels*, **2018**, 32, 9804-9812	4.1	3
134	Refractory Character of 4,6-Dialkyldibenzothiophenes: Structural and Electronic Instabilities Reign Deep Hydrodesulfurization. **2018**, 3, 8849-8856		7
133	Hydrodearomatization of Model Monoaromatics Over Ni/Al2O3: Theoretical and Experimental Approaches. **2018**, 148, 2548-2560		1
132	Multiple C-H Bond Activations and Ring-Opening C-S Bond Cleavage of Thiophene by Dirhenium Carbonyl Complexes. *Inorganic Chemistry*, **2018**, 57, 7957-7965	5.1	9
131	Iron(II) Mediated Desulfurization of Organosulfur Substrates Produces Nonheme Diiron(II)-hydrosulfides. *Inorganic Chemistry*, **2019**, 58, 9998-10011	5.1	7
130	Using DFT Models of Thiophene Adsorption at Transition Metal Interfaces to Interpret Periodic Trends in Thiophene Hydrodesulfurization on Transition Metal Sulfides. **2019**, 149, 2953-2960		0
129	Nitrogen Speciation: Application to Reactivity of Feeds to Hydroprocessing and Catalyst Deactivation. **2019**, 261-280		
128	On the enhanced catalytic activity of acid-treated, trimetallic Ni-Mo-W sulfides for quinoline hydrodenitrogenation. *Journal of Catalysis*, **2019**, 380, 332-342	7.3	12
127	CFD Studies on Efficacy of Flow Modulation in a Hydrotreating Trickle-Bed Reactor. *Industrial & Engineering Chemistry Research*, **2019**, 58, 18073-18083	3.9	1

126	Insights from Nitrogen Compounds in Gas Oils Highlighted by High-Resolution Fourier Transform Mass Spectrometry. **2019**, 91, 12644-12652		14
125	Molecular-Level Kinetic Modeling of a Real Vacuum Gas Oil Hydroprocessing Refinery System. *Energy & Fuels*, **2019**, 33, 10143-10158	4.1	7
124	Kinetics study and reactor simulation of full-range low-temperature coal tar during hydrodeoxygenation process. **2019**, 41, 2725-2733		3
123	Effects of Aging Treatment on the Hydrotreating Performance of the Unsupported Catalyst. *Industrial & Engineering Chemistry Research*, **2019**, 58, 2683-2688	3.9	2
122	Evaluation of the Interest of NiMo Catalysts Supported on MgO□TiO2 for Hydrodesulfurization Applications. **2019**, 149, 2656-2670		1
121	Complete Hydrodesulfurization of Dibenzothiophene via Direct Desulfurization Pathway over Mesoporous TiO2-Supported NiMo Catalyst Incorporated with Potassium. **2019**, 9, 448		8
120	Extractive desulfurization of gasoline using binary solvent of bronsted-based ionic liquids and non-volatile organic compound. **2019**, 73, 2757-2765		3
119	Paving the way towards green catalytic materials for green fuels: impact of chemical species on Mo-based catalysts for hydrodeoxygenation.. **2019**, 9, 18292-18301		5
118	Liquid□liquid Equilibrium for Ternary Systems of N-Methylformamide + Pyrrole/Indole + Alkanes at 298.15 K: Phase Equilibrium Measurement and Correlation. **2019**, 64, 3085-3091		5
117	MoO3-based catalysts supported on SiO2 and their performance in hydrodeoxygenation. **2019**, 251, 226-229		6
116	Catalytic upgrading of hydrothermal liquefaction biocrudes: Different challenges for different feedstocks. *Renewable Energy*, **2019**, 141, 420-430	8.1	69
115	Production of liquid fuels from low-temperature coal tar via hydrogenation over CoMo/USY catalysts. *Reaction Kinetics, Mechanisms and Catalysis*, **2019**, 127, 961-978	1.6	8
114	Molecular-Level Insights into Coker/Straight-Run Gas Oil Hydrodenitrogenation by Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. *Energy & Fuels*, **2019**, 33, 3034-3046	4.1	15
113	Exploring thiophene desulfurization: The adsorption of thiophene on transition metal surfaces. **2019**, 686, 30-38		2
112	Modelling of H2 consumption and process optimization for hydrotreating of light gas oils. **2019**, 97, 1828-1837		2
111	Heteroatom Removal as Pretreatment of Boiler Fuels. *Energy & Fuels*, **2019**, 33, 5790-5801	4.1	3
110	Upgrading of light cycle oil for ultra low sulphur diesel production by a solvent extraction procedure. **2019**, 22, 315		
109	Effect of support on the acidity of NiMo/Al2O3-MgO and NiMo/TiO2-Al2O3 catalysts and on the resulting competitive hydrodesulfurization/hydrodenitrogenation reactions. *Fuel*, **2019**, 236, 55-64	7.1	40

108	Hollow monocrystalline silicalite-1 hybrid membranes for efficient pervaporative desulfurization. **2019**, 65, 196-206		7
107	Deep Desulfurization of Fuels Using Imidazole Anion-Based Ionic Liquids. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 1890-1900	8.3	28
106	The multi-scale challenges of biomass fast pyrolysis and bio-oil upgrading: Review of the state of art and future research directions. **2019**, 71, 1-80		184
105	Effects of Citric Acid Addition Method on the Activity of NiMo/Al2O3 Catalysts in Simultaneous Hydrodesulfurization and Hydrodenitrogenation Reactions. *Energy & Fuels*, **2019**, 33, 1450-1457	4.1	8
104	Adsorption of nitrogenous inhibitor molecules on MoS2 and CoMoS hydrodesulfurization catalysts particles investigated by scanning tunneling microscopy. *Journal of Catalysis*, **2019**, 370, 232-240	7.3	18
103	Shifting Desulfurization Equilibria in Ionic Liquid–Oil Mixtures. *Energy & Fuels*, **2019**, 33, 1106-1113	4.1	6
102	A carbon-number lump based model for simulation of industrial hydrotreaters: Vacuum gas oil (VGO). **2019**, 358, 504-519		7
101	Molecular-level kinetic modelling of fluid catalytic cracking slurry oil hydrotreating. **2019**, 195, 619-630		22
100	Towards oxidative denitrogenation of fuel oils: Vanadium oxide-catalysed oxidation of quinoline and adsorptive removal of quinoline-N-oxide using 2,6-pyridine-polybenzimidazole nanofibers. **2019**, 12, 198-214		16
99	HDS of 4,6-dimethyldibenzothiophene over CoMoS supported mesoporous SiO2-TiO2 materials. *Catalysis Today*, **2020**, 357, 675-683	5.3	4
98	Extractive desulfurization of fuels using trialkylamine-based protic ionic liquids. **2020**, 231, 115923		38
97	CYHPO oxidation followed by methylation for selective characterization of thiophenic and sulfidic compounds in petroleum via ESI FT-ICR MS. *Fuel*, **2020**, 265, 116907	7.1	3
96	The Upgrading of Bio-Oil via Hydrodeoxygenation. **2020**, 35-60		5
95	Catalytic kinetics for ultra-deep hydrodesulfurization of diesel. **2020**, 214, 115446		12
94	Sulfided Homogeneous Iron Precatalyst for Partial Hydrogenation and Hydrodesulfurization of Polycyclic Aromatic Model Asphaltenes. *Energy & Fuels*, **2020**, 34, 16532-16541	4.1	1
93	Effect of Hydroconversion Conditions on the Composition and Properties of an Ultrafine Mo-Containing Catalyst Formed in situ. **2020**, 60, 1154-1163		2
92	Zr-Based MOFs for oxidative desulfurization: what matters?. **2020**, 22, 6351-6356		19
91	Bruce Gates: A Career in Catalysis. **2020**, 10, 11912-11935		5

90	Computational insights on intensification of hydrodenitrogenation in a trickle bed reactor using periodic flow modulation. **2020**, 157, 108135		5
89	Change in the Apparent Order at Different Temperatures and Catalyst Volumes: Hydrodesulfurization of KEC-AR. **2020**, 5, 32564-32572		2
88	Hydrofining Process of Coal Tar Based on Four Kinds of Catalyst Grading. *Energy & Fuels*, **2020**, 34, 6510-6517	4.1	7
87	Enhancing hydrogenation activity of Ni-Mo sulfide hydrodesulfurization catalysts. **2020**, 6, eaax5331		18
86	Kinetic Parameter Calculation and Trickle Bed Reactor Simulation Based on Pilot-Scale Hydrodesulfurization Test of High-Temperature Coal Tar. **2020**, 5, 12923-12936		3
85	Kinetics and mechanisms of homogeneous catalytic reactions. Part 16. Regioselective hydrogenation of quinoline catalyzed by dichlorotris(triphenylphosphine)ruthenium(II). **2020**, 490, 110970		3
84	Recent developments in alumina supported hydrodesulfurization catalysts for the production of sulfur-free refinery products: A technical review. **2020**, 1-86		41
83	Effect of sulfur compounds on the hydrodenitrogenation of 1,2,3,4-tetrahydroquinoline and its intermediates over NiMo/Al2O3 catalyst. *Fuel*, **2020**, 277, 118186	7.1	3
82	Evaluation of pressure and temperature effects on hydropyrolysis of pine sawdust: pyrolysate composition and kinetics studies. **2020**, 5, 1484-1500		11
81	Can Heteroarenes/Arenes Be Hydrogenated Over Catalytic Pd/C Under Ambient Conditions?. **2020**, 2020, 5514-5522		8
80	Multiscale Exploration and Experimental Insights into Separating Neutral Heterocyclic Nitrogen Compounds Using [emim][NO3] as an Extractant. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 5662-5673	8.3	24
79	Epitaxial synthesis of Ni-MoS/TiCT MXene heterostructures for hydrodesulfurization.. **2020**, 10, 12308-12317		2
78	Comparative Study for the Cobalt(II)- and Iron(II)-Mediated Desulfurization of Disulfides Demonstrating That the C-S Bond Cleavage Step Precedes the S-S Bond Cleavage Step. *Inorganic Chemistry*, **2020**, 59, 4037-4048	5.1	5
77	Extractive Catalytic Oxidative Denitrogenation of Fuels and Their Promoting Effect for Desulfurization Catalyzed by Vanadium Substituted Heteropolyacids and Molecular Oxygen. *Energy & Fuels*, **2020**, 34, 8099-8109	4.1	10
76	Maldistribution Effects in an Industrial-Scale Trickle Bed Reactor. *Industrial & Engineering Chemistry Research*, **2020**, 59, 7405-7415	3.9	4
75	Extractive denitrogenation of shale oil using imidazolium ionic liquids. **2020**, 5, 173-182		15
74	Steric Hindrance of Methyl Group on the Reaction Pathway of Hydrodesulfurization in the Presence of Quinoline. **2021**, 151, 194-211		3
73	Desulfurization of gasoline by [C4, 6, 8mim]Br/FeCl3 ILs collaboration with CTAB. **2021**, 56, 310-321		3

72	Properties and utilization of waste tire pyrolysis oil: A mini review. **2021**, 211, 106582		37
71	Influence of the Ir content and the support on the thiotolerance of the Ir/SiO2-Al2O3 catalysts for selective ring opening of decalin. **2021**, 99, 1146-1157		2
70	An insight into the molecular structure of sulfur compounds and their reactivity during residual oil hydroprocessing. *Fuel*, **2021**, 283, 119334	7.1	6
69	Naphthalene hydrogenation using Rh/Fe2O3-TiO2 magnetic catalysts. *Catalysis Today*, **2021**, 360, 176-184	5.3	4
68	Effect of pre-activation treatment temperature on hydrodesulfurization catalytic activity of CoMoS/KIT-6. *Catalysis Today*, **2021**, 360, 106-115	5.3	2
67	How to select ionic liquids as extracting agents systematically: a special case study for extractive denitrification processes.. **2020**, 11, 700-710		
66	Selective hydrogenation of light cycle oil for BTX and gasoline production purposes. *International Journal of Chemical Reactor Engineering*, **2021**,	1.2	1
65	A review on catalytic hydrodeoxygenation of lignin to transportation fuels by using nickel-based catalysts. **2021**, 138, 110667		24
64	Thermodynamics and kinetics insights into naphthalene hydrogenation over a Ni-Mo catalyst. **2021**,		2
63	Effects of Water Addition on the Conversion of o-Cresol in the Presence of In Situ NiMo Sulfide Catalysts. **2021**, 61, 682		0
62	Mechanism of Guaiacol Hydrodeoxygenation on Cu (111): Insights from Density Functional Theory Studies. **2021**, 11, 523		1
61	Synthesis of Few Layer Amorphous 1T/2H MoS2 by a One-Step Ethanol/Water Solvothermal Method and Its Hydrodesulfurization Performance. 1		1
60	Electrostatic Reaction Inhibition in Nanoparticle Catalysis. **2021**, 37, 6800-6810		0
59	Effect of blending on hydrotreating reactivities of atmospheric residues: Synergistic effects. *Fuel*, **2021**, 293, 120429	7.1	2
58	Abatement of hazardous materials and biomass waste via pyrolysis and co-pyrolysis for environmental sustainability and circular economy. **2021**, 278, 116836		21
57	A Review on the Reaction Mechanism of Hydrodesulfurization and Hydrodenitrogenation in Heavy Oil Upgrading. *Energy & Fuels*, **2021**, 35, 10998-11016	4.1	12
56	Impact of Feedstock Properties on the Deactivation of a Vacuum Gas Oil Hydrocracking Catalyst. *Energy & Fuels*, **2021**, 35, 12297-12309	4.1	2
55	The Influence of Hydrodearomatisation Reaction Kinetics on the Modelling of Sulphur and Aromatics Removal from Diesel Fuel in an Industrial Hydrotreating Process. *Energies*, **2021**, 14, 4616	3.1	0

54	Study of Crude Oil Fouling from Sulfur-Containing Compounds Using High-Resolution Mass Spectrometry. *Energy & Fuels*, **2021**, 35, 13022-13029	4.1	2
53	Enhancement of hydrotreating process evaluation: correlation between feedstock properties, in-line monitoring and catalyst deactivation. *Catalysis Today*, **2021**,	5.3	0
52	One-step synthesis of mesoporous alumina-supported molybdenum carbide with enhanced activity for thiophene hydrodesulfurization. *Journal of Environmental Chemical Engineering*, **2021**, 9, 105693	6.8	2
51	Lumped kinetic model for the hydrodeoxygenation of full-range middle-low temperature coal tar. *Reaction Kinetics, Mechanisms and Catalysis*, **2021**, 134, 179	1.6	
50	Application of Laser-Desorption Silver-Ionization Ultrahigh-Resolution Mass Spectrometry for Analysis of Petroleum Samples Subjected to Hydrotreating. *Energy & Fuels*,	4.1	0
49	Fabrication of CoNiMo/Al2O3 from waste aluminum foil to convert waste lube oil to hydrotreated oil. *Egyptian Journal of Petroleum*, **2021**, 30, 21-21	3.4	1
48	Lumped kinetic simulation of hydrodenitrogenation for full-range middle-low temperature coal tar. *International Journal of Chemical Kinetics*, **2021**, 53, 716-730	1.4	0
47	Nitrogen compounds removal from oil-derived middle distillates by MIL-101(Cr) and its impact on ULSD production by hydrotreating. *Oil and Gas Science and Technology*, **2021**, 76, 56	1.9	1
46	Carbazole Metabolism by Pseudomonads. **2007**, 107-145		8
45	Hydrodeoxygenation of Oxygenated Model Compounds: Simulation of the Hydro-Purification of Bio-Oils. **1993**, 1403-1414		2
44	Effects of Catalyst Composition and Pretreatment on the Product Distribution in Hydrodesulphurization, Hydrodenitrogenation and Hydrodechlorination. **1998**, 273-309		1
43	Hydrogenation, Hydrogenolysis and Desulphurization of Thiophenes by Soluble Metal Complexes. **1998**, 129-154		4
42	Tailoring silica–alumina-supported Pt–Pd as poison-tolerant catalyst for aromatics hydrogenation. *Journal of Catalysis*, **2013**, 304, 135-148	7.3	29
41	Precious metal catalysts for deep hydrodesulfurization. *Catalysis*, 96-138	1.6	3
40	Promotion of Catalytic Activity and Suppression of Deactivation by Solvent Addition in the Hydrotreating of Atmospheric Residue. *Journal of the Japan Petroleum Institute*, **2004**, 47, 303-310	1	3
39	Hydrodesulfurization of light gas oil: Kinetic determination in a batch reactor. *Hemijska Industrija*, **2002**, 56, 529-532	0.6	1
38	Conversion of sulphur compounds into light gas oil: I. Kinetics of the conversion of model compounds. *Hemijska Industrija*, **2002**, 56, 68-75	0.6	
37	Hydrofining and Hydrotreating. **2003**,		

36	Automated Kinetic Modeling of Gas Oil Hydroprocessing. *Chemical Industries*, **2005**, 159-182		
35	Detergent Enzymes. **2005**, 673-684		
34	Characteristics of Heavy Oil Hydroprocessing Catalysts. *Chemical Industries*, **2007**, 121-190		2
33	Chemistry of Hydroprocessing. *Chemical Industries*, **2007**, 223-264		
32	Cleaner Energy Fuels. *Advances in Chemical and Materials Engineering Book Series*, **2016**, 84-128	0.2	
31	saturation kinetics.		
30	Kinetic Modelling of the Influence of H₂S on Dibenzothiophene Hydrodesulfurization in a Batch System over Nano-MoS₂. *Advances in Chemical Engineering and Science*, **2020**, 10, 135-148	0.4	0
29	Surfaces of Bulk Oxides. *Springer Handbooks*, **2020**, 155-195	1.3	1
28	Hydrodesulfurization of dibenzothiophene using NiMoWS catalysts supported on Al$_2$O$_3$-Mg and TiO$_2$-Mg mixed oxides. *International Journal of Chemical Reactor Engineering*, **2020**, 18,	1.2	
27	Algal bio-oil refinery: A review of heterogeneously catalyzed denitrogenation and demetallization reactions for renewable process. *Renewable Energy*, **2022**, 183, 627-650	8.1	0
26	Molybdenum boron based catalysts loaded on MnO alumina support for hydrodesulfurization of dibenzothiophene. *Inorganic Chemistry Communication*, **2022**, 109237	3.1	3
25	Molecular Structures of Refractory Sulfur Compounds in Heavy Oil Hydrodesulfurization Characterized by Collision-Induced Dissociation Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. *Energy & Fuels*, **2022**, 36, 1326-1337	4.1	1
24	Integrated Approaches and Future Perspectives. **2022**, 613-651		
23	The effect of the nanoscale intimacy of platinum and acid centres on the hydroisomerization of short-chain alkanes. *Applied Catalysis A: General*, **2022**, 118535	5.1	0
22	Low-temperature selective transformation of diethylbenzene to isobutane and cyclohexanes via the interplay of Pt and acid centres in Pt/H-*BEA zeolites. *Journal of Catalysis*, **2022**,	7.3	0
21	Martini 3 Coarse-Grained Model for Type III Deep Eutectic Solvents: Thermodynamic, Structural, and Extraction Properties. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 17338-17350	8.3	1
20	Conversion of Phenol and Lignin as Components of Renewable Raw Materials on Pt and Ru-Supported Catalysts.. *Molecules*, **2022**, 27,	4.8	1
19	Insight into metal-support interactions from the hydrodesulfurization of dibenzothiophene over Pd catalysts supported on UiO-66 and its amino-functionalized analogues. *Journal of Catalysis*, **2022**, 407, 333-341	7.3	0

18	Optimization of the Metal Phase Composition of IrPd/SiO2Al2O3 Catalysts to Increase Thiotolerance in Selective Ring Opening of Decalin. *Topics in Catalysis*, 1	2.3	
17	Synthesis and characterization of Fe2O3-TiO2 magnetic materials: Effect of heat-treatment on catalytic activity of naphthalene hydrogenation. *Catalysis Today*, **2022**, 392-393, 167-179	5.3	0
16	Extractive desulfurization of fuel oils using deep eutectic solvents A comprehensive review. *Journal of Environmental Chemical Engineering*, **2022**, 10, 107369	6.8	1
15	Catalytic Hydrolysis of Thiolates to Alcohols.. *Inorganic Chemistry*, **2022**,	5.1	
14	Molecular analysis of nitrogen-containing compounds in vacuum gas oils hydrodenitrogenation by (ESI+/-)-FTICR-MS. *Fuel*, **2022**, 323, 124302	7.1	0
13	Hydrotreating of bio-crude obtained from hydrothermal liquefaction of biopulp: effects of aqueous phase recirculation on the hydrotreated oil. *Sustainable Energy and Fuels*,	5.8	0
12	Hydrocarbon Fuels from Lignite Hydrothermal Liquefaction. *SSRN Electronic Journal*,	1	
11	Kinetic Models Study of Hydrogenation of Aromatic Hydrocarbons in Vacuum Gas Oil and Basrah Crude Oil Reaction. *Tikrit Journal of Engineering Science*, **2022**, 16, 1-11	1.2	
10	The characteristics and evolution of nitrogen in bio-oil from microalgae pyrolysis in molten salt. **2023**, 331, 125903		3
9	Understanding the Upgrading of Sewage Sludge-Derived Hydrothermal Liquefaction Biocrude via Advanced Characterization. **2022**, 36, 12010-12020		0
8	Selective hydrogenation and defunctionalization of heavy oil model compounds using an unsupported iron catalyst. **2023**, 333, 126184		0
7	Recent progress in hydrotreating kinetics and modeling of heavy oil and residue: A review. **2023**, 334, 126404		0
6	Tracing the Composition and Structure Evolution of Oxygen-enriched Asphaltenes During the Hydrotreating of Middle-low Temperature Coal Tar. **2022**, 105780		0
5	Hydrodenitrogenation Homogeneous.		0
4	Hydrodenitrogenation Heterogeneous.		0
3	The catalytic hydrogenolysis of compounds derived from guaiacol on the Cu (111) surface: mechanisms from DFT studies.		0
2	Kinetics of simultaneous hydrodesulfurization and hydrodenitrogenation reactions using CoMoP/Al2O3 and NiMoP/Al2O3. **2023**, 275, 118725		0
1	Preparation of ultrasmall Ni2P nanoparticles with low P/Ni ratios supported on SiO2 and an Al2O3-B2O3 mixed oxide for dibenzothiophene hydrodesulfurization. **2023**, 420, 110-122		0