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An Introduction to  
THE CUMULATIVE SUBJECT AND AUTHOR INDEX FOR  
Volumes 40-51, 1988-1993 of  
**SOLAR ENERGY**

The Journal of the  
International Solar Energy Society®

Note: This Author and Subject Index to Volumes 1-51 of Solar Energy will also be available on disk for MS/DOS microcomputers. For further information on the disk versions or availability via ftp on the Internet, contact the *Solar Energy* Editorial Office in Waterloo, Canada. For additional copies of this issue, contact Elsevier Science, Inc.

The last cumulative index to SOLAR ENERGY was published in Volume 40 in 1988, and covered Volumes 1-39. These indexes cover all of the papers in Volumes 40-51, from 1988 to 1993.

The keywords used are the same as those used in Volume 40. For the user's convenience, the keywords and cross references are shown in Table 1. The numbered items are those used as keywords. The items not numbered are cross references.

Each paper has been assigned up to three keywords (which are identified by numbers). Most of the keyword assignments were made by the authors.\*

Several approaches to the development of the keyword list were possible. The easiest would have been to use a small number of keywords resulting in many entries under each keyword. Or, a large number of keywords would result in an index containing more information, but more difficult to assemble and use. The final list developed is between the extremes. It is designed to include enough keywords to provide a useful level of detail, but should not require excessive searches through many subjects to find the references on general topics. To make use of the index easier (and also to help in its preparation), categories of keywords have been developed. For example, a category for "Flat Plate Collectors" includes the keywords that are most likely to lead the user on papers on various aspects of flat plate collectors. A list of fifteen of these categories is shown in Table 2. Tables 3a to 3o list the keywords for the various categories; these provide a convenient way to find the range of references dealing with these subject areas in the broader field of solar energy.

There are entries that appear on more than one of the category lists. This is evidence of one of the problems in preparation of the index, i.e., how the overlaps of subject areas should be handled. An obvious example of this problem is in collectors. It is often clear that a paper deals primarily with either performance or theory, but in a sense any paper on theory deals with performance. In many cases it has been possible to distinguish between flat plate, CPC, and concentrating collectors, but theory of one often applies to the others.

The listings under "CPC" cover a wide range of non-imaging collectors, and are not limited to those that are parabolic.

Active and passive systems provide other examples; design methods can apply to both, and the "Design Method" category includes references to papers on both active and passive systems.

In cases where there were few references under a desired keyword, combinations of keywords have been used. For example, "Photobiology" and "Photosynthesis" are combined. The cross references in the keyword list are designed to make it easy to find these papers.

The user of the index will have to do some exploring if he or she is looking for references in subjects where the distinctions are not clear.

#### THE INDEXES

The SUBJECT INDEX shows three items for each entry.

*Author.* The name indicated is that of the first author. (All authors are listed in the author index.)

*Volume, Page.* The volume and page numbers of the paper. All page numbers are three digit numbers, e.g., 008 is page 8, and 097 is page 97.

*Title.* As much of the title as will fit on the line is included. The full title is shown for most papers; some are not complete.

The AUTHOR INDEX also shows three items for each entry.

*Author.* The last name and initials are shown. There is an entry in the index for each author of every paper.

*Volume, Page.* The volume and page numbers of the paper.

*Keyword Numbers.* The one, two, or three keyword numbers assigned to the paper are shown. These are translated into subjects in Table 1, and the numbers are indicated at the beginning of each subject category in the subject index.

#### ERRORS

A substantial effort has gone into compiling this index, and many checks on its accuracy have been made. We hope that there will be few errors, but there will certainly be some. There may be errors in spelling, in page or volume numbers, or keywords. There may also be disagreements about assignments of keywords to papers. The Editorial Office would appreciate learning of any errors.

J. A. Duffie  
Madison, WI, USA  
December 1994

\*Assistance in assigning keywords has been provided by Prof. Jane Davidson at the University of Minnesota, and by the staff of the Solar Energy Laboratory of the University of Wisconsin. Laurie Sheahan has assembled the indexes in a most skillful manner.

Table 1. Keywords

	Absorptance and Emittance—see Selective Surface	4380	Drying
4010	Absorption Cooling—see Cooling, Absorption	4390	Duration of Sunshine—see Cloud Cover
	Active System Designs		Economics
	Aeolian Energy—see Wind		Emittance and Absorptance—see Selective Surface
	Aging—see Performance Degradation	4400	Energy Economies
	Agriculture—see Biomass, Plant Growth, Drying	4410	Engines
4020	Air Conditioning—see Cooling		Elolian Energy—see Wind
	Air Heater		Evacuated Collector—see Collector, Evacuated
	Albedo—see Ground Reflectance	4420	Evaporation
4030	Angles, Solar		Extraterrestrial Radiation—see Solar Constant
4040	Architecture		Flat Plate Collector—see Collector, Flat Plate
4050	Atmospheric Transmittance		Flourescence—see Photochemistry
4060	Beam and Diffuse Radiation		Focussing Collector—see Collector, Concentrating
4070	Biomass		Freeze Protection
4080	Building Heating and Cooling	4430	Furnace, Solar
4090	Building Heating, Active	4440	Gasification—see Pyrolysis and Gasification
4100	Building Heating, Active, Performance		General Topics—see Reviews
4110	Building Heating, Design		Geometry, Solar—see Angles, Solar
4120	Building Heating, Passive		Glazing—see also Transmittance
4130	Building Heating, Passive, Performance	4450	Global-Diffuse Radiation—see Beam and Diffuse Radiation
	Buildings, Solar—see 52(1)		Greenhouse and Sunspace
	Cells, Solar—see Photovoltaic		Ground Reflectance
4140	Central Receiver Systems	4460	Ground Temperature—see Soil Temperature
	Chemical Heat Pumps—see Heat Pump Systems	4470	Heat Pump System
	Chemical Storage—see Storage, Chemical		Heat Transfer—see Central Receiver systems; Collector
	Circumsolar Radiation—see Beam and Diffuse Radiation	4480	Heating of Building—see Building Heating, Active or Passive
	Climatic Data—see Radiation Data		Heating or Cooling Loads
4150	Cloud Cover and Sunshine Duration		Heating, Swimming Pool—see Swimming Pool
4160	Collector Testing		Heating
4170	Collector, Concentrating	4490	Hybrid Heating Systems
4180	Collector, CPC	4510	Hydrogen Production
4190	Collector, Design	4520	Imaging Furnace—see Furnace, Solar
4200	Collector, Evacuated		Industrial Process Heat
4210	Collector, Flat Plate	4530	Insulation, Transparent—see Collector, Thermal Losses; Glazing; Transmittance. See 49(5)
4220	Collector, Flat Plate, Reflector Augmented	4540	Integral Collector Storage DHW—see Thermosyphon Systems
4230	Collector, Orientation		Integrated Energy Systems
4240	Collector, Performance	4550	Legal Aspects
4250	Collector, Theory, Concentrator		Long-Time Performance—see Performance Degradation
4260	Collector, Theory, CPC		Ocean Thermal Energy
4270	Collector, Theory, Flat Plate		Orientation, Collector—see Collector, Orientation
4280	Collector, Thermal Losses		Packed Bed Storage—see Storage, Packed Bed
	Collector, Tracking—see Collector, Concentrating		Passive Heating of Building—see Building Heating, Passive
	Collector-Storage Wall—see Passive, Trombe Wall		Passive System Design
	Concentrating Collector—see Collector, Concentrating		Passive Water Heater—see Water Heating, Passive
4290	Controls		Passive, Collector Storage Wall—see Passive, Trombe Wall
4300	Cooking		Passive, Direct Gain
	Cooling Loads—see Heating or Cooling Loads		Passive, Sunspace—see Greenhouse and Sunspace
4310	Cooling, Absorption		Passive, Trombe Wall and Roof Pond
4320	Cooling, Desiccant		Pebble Bed Storage—see Storage, Packed Bed
4330	Cooling, Mechanical-Solar		Performance Degradation
4340	Cooling, Passive		Performance Predictions, Systems—see Design Methods, Systems
	Cooling, Radiative—see Radiative Cooling		Phase Change Storage—see Storage, Phase Change
4350	Cooling, Thermoelectric		Photobiology and Photosynthesis
	Corrosion—see Performance Degradation		Photochemistry and Fluorescence
	Cover—see Glazing		Photoelectrochemistry
	CPC Collector—see Collector, CPC		Photosynthesis—see Photobiology and Photosynthesis
	Daylighting—see Building Heating, Passive		
	Desiccant Cooling—see Cooling, Desiccant		
	Design—see component, system or application		
	Design Method, Systems		
	Deterioration—see Performance Degradation		
	Diffuse Radiation—see Beam and Diffuse Radiation		
	Direct-Diffuse Radiation—see Beam and Diffuse Radiation		
	Direct Gain Passive—see Passive, Direct Gain Distillation and Water Purification		
4360			
4370			

*Continued*

Table 1. (Contd.)

4630	Photovoltaic Cell/Array/System Performance	4870	Space Applications
4640	Photovoltaic Cells		Spectral Distribution—see Radiation, Spectral Distribution
4650	Photovoltaic System Simulation, Design, Applications	4880	Specular Reflection
4660	Photovoltaic, Economics	4890	Storage, Chemical—see also Thermochemistry
4670	Plant Growth	4900	Storage, Packed Bed
4680	Pond, Solar—see 45(4), Pool Heating—see Swimming Pool Heating	4910	Storage, Phase Change
4690	Pump	4920	Storage, Seasonal
	Pyranometer—see Radiation Instrument	4930	Storage, Sensible
	Pyrheliometer—see Radiation Instrument	4940	Storage, Stratification
4700	Pyrolysis and Gasification		Sun—see Solar Constant & Extraterrestrial Radiation
4710	Radiation and Weather Data		Sunrise, Sunset—see Angles, Solar Sunshine Duration—see Cloud Cover & Sunshine Duration
4720	Radiation Estimation		Sunspace Passive—see Passive, Sunspace Swimming Pool Heating
4730	Radiation Instrument		System Testing
	Radiation Models—see Beam and Diffuse Radiation	4950	Thermal Power System
4740	Radiation Statistics	4960	Thermochemical Processes
	Radiation, Beam and Diffuse—see Beam and Diffuse Radiation	4970	Thermoelectric and Thermionic Processes
4750	Radiation, Spectral Distribution	4980	Thermogalvanic—see Thermochemical Processes
4760	Radiation, Tilted Surfaces	4990	Thermophotovoltaic
4770	Radiative Cooling—see also Sky Radiation	5000	Thermosyphon System
	Refrigeration—see Cooling	5010	Tracking—see Collector, Orientation or Concentrating
	Reliability—see Performance Degradation		Transmittance—see also Glazing
4780	Research & Development Programs	5020	Transparent Insulation—see Collector, Thermal Losses; Glazing; Transmittance. See 49(5)
4790	Reviews		Trombe Wall Passive—see Passive, Trombe Wall
	Rock Bed Storage—see Storage, Packed Bed		Utilizability
	Roof Pond—see Passive, Trombe Wall & Roof Pond		Water Heating, Active
	Salt Gradient Pond—see Pond, Solar	5030	Water Heating, Active, Performance
4800	Selective Surface, Absorption, Emission, Reflection	5040	Water Heating, Design
	Sensible Storage—see Storage, Sensible	5050	Water Heating, Passive—see Thermosyphon System
4810	Shading and Blocking	5060	Water Heating, Passive, Performance
4820	Simulation and Analysis of System Performance		Weather Satatistics—see Radiation, Weather Data
4830	Sky Radiation—see also Radiative Cooling		Wind
	Sky Temperature—see Sky Radiation	5070	Wind Systems, Applications, Economics
4840	Soil Temperature	5080	Wind, Dynamics
	Solar Angles—see Angles, Solar	5090	Wind, Hybrid Applications
	Solar Cells—see Photovoltaic		Wind, Resource Assessment
4850	Solar Constant and Extraterrestrial Radiation	5100	Wind, Turbines
	Solar Geometry—see Angles, Solar	5110	Wind, Utility Interface
	Solar Position—see Angles, Solar	5120	
4860	Solar Radiation Simulation	5130	
		5140	

## SUBJECT CATEGORIES

There are subject categories of keywords that are closely related. Table 2 lists categories that have been useful in assigning keywords. Tables 3a-3o show these lists and include brief explanations of some keywords that were used as guidelines by the index preparers. It is obvious that these categories overlap. They are intended to serve as useful guidelines to the user of the index in finding appropriate references.

**Table 2. SUBJECT CATEGORIES**

- 
- |    |   |
|----|---|
| 3a | Biological Processes                        |
| 3b | Concentrating Collectors                    |
| 3c | CPC Collectors                              |
| 3d | Design                                      |
| 3e | Direct Conversion (other than Photovoltaic) |
| 3f | Flat Plate Collectors                       |
| 3g | Photovoltaics                               |
| 3h | Radiation Measurements and Data             |
| 3i | Space Heating, Active                       |
| 3j | Space Heating, Passive                      |
| 3k | Storage                                     |
| 3l | Systems                                     |
| 3m | Water Heating, Active                       |
| 3n | Water Heating, Passive                      |
| 3o | Wind  |
- 

**Table 3a. BIOLOGICAL PROCESSES**

- 
- |      |                                 |
|------|---------------------------------|
| 4070 | Biomass                         |
| 4600 | Photobiology and Photosynthesis |
| 4670 | Plant Growth                    |
| 4700 | Pyrolysis and Gasification      |
- 

This category includes the use of solar energy in growth of plants to form biomass and the processing of biomass by pyrolysis, gasification, or other means to make fuels.

**Table 3b. CONCENTRATING COLLECTORS**

- 
- |      |  |
|------|--|
| 4140 | Central Receiver Systems                   |
| 4170 | Collector, Concentrating                   |
| 4180 | Collector, CPC                             |
| 4190 | Collector, Design                          |
| 4220 | Collector, Flat Plate, Reflector Augmented |
| 4230 | Collector, Orientation                     |
| 4240 | Collector, Performance                     |
| 4250 | Collector, Theory, Concentrator            |
| 4260 | Collector, Theory, CPC                     |
| 4280 | Collector, Thermal Losses                  |
| 4430 | Freeze Protection                          |
| 4440 | Furnace, Solar                             |
| 4590 | Performance Degradation                    |
| 4880 | Specular Reflection                        |
- 

This category includes papers that deal with various aspects of collectors that use optical systems to increase the level of radiation on a receiver.

**Central Receiver Systems**—Any aspects of central receiver (power tower) systems, including heliostat field, receiver, losses, shading storage, performance, etc.

**Collector, Concentrating**—A general category for papers on configurations and other aspects of concentrators that do not fit under other keywords.

**Collector, CPC**—Non-imaging collectors of the general type described as CPC, whether or not they are actually parabolic. Includes theory, design, orientation, performance, etc.

**Collector, Design**—Thermal or mechanical design of collectors.

**Collector Performance**—Data or calculations.

**Collector, Theory, Concentrator**—Theory of optical or thermal performance of non-imaging collectors.

**Collector, Theory, CPC**—Theory of optical or thermal performance of non-imaging collectors.

**Collector, Thermal Losses**—Theory or measurements of thermal losses from collectors.

**Freeze Protection**—Design, controls, or other means for avoiding freeze damage.

**Furnaces, Solar**—Imaging furnaces using solar (or other) radiation source, usually for materials or chemical research.

**Performance Degradation**—Performance loss with time due to deterioration of materials, etc.

**Specular Reflection**—The material property (reflectance).

**Table 3c. CPC COLLECTORS**

4260	Collector, CPC
4190	Collector, Design
4200	Collector, Evacuated
4230	Collector, Orientation
4240	Collector, Performance
4260	Collector, Theory, CPC
4280	Collector, Thermal Losses
4590	Performance Degradation

This category includes papers that deal with non-imaging concentrators generally described as CPC (compound parabolic concentrators) whether or not they are parabolic. Because most of these collectors use evacuated tube receivers, many papers on them will be listed under 1320 and 1340.

**Collectors, CPC**—Non-imaging collectors of the CPC type. Includes theory, design, orientation, performance, etc.

**Collector, Design**—Thermal or mechanical design of collectors.

**Collector, Orientation**—Effects of orientation on design and performance.

**Collector, Performance**—Data or calculations.

**Collector, Theory, CPC**—Theory of optical or thermal performance.

**Collector, Thermal Losses**—Theory or measurements of thermal losses from collectors.

**Performance Degradation**—Performance loss with time due to deterioration of materials, etc.

**Table 3d. DESIGN**

4010	Active System Design
4110	Building Heating, Design
4190	Collector, Design
4360	Design Method, Systems
4390	Economics
4560	Passive System Design
4650	Photovoltaic System Simulation, Design, Applications
4820	Simulation of System Performance
5060	Water Heating, Design

This category covers both methods for designing components and systems, and information about specific designs.

**Active System Design**—Designs of space heating, water heating, or other applications of active systems.

**Building Heating, Design**—Designs of active building heating systems.

**Collector, Design**—Designs of flat plate or other collectors.

**Design Method, Systems**—Methods such as f-chart, SEU, or others for estimating annual performance and design of active or passive systems.

**Economics**—Economic analysis methods and economics of specific components, systems, and applications.

**Passive Systems Design**—Designs of space heating, water heating, or other applications of passive processes.

**Photovoltaic System Simulation, Design, Applications**—Methods of design and specific system designs of photovoltaic systems.

**Simulation of System Performance**—Computer computation of system performance.

**Water Heating, Design**—Designs of water heating systems.

**Table 3e. DIRECT CONVERSION (OTHER THAN PHOTOVOLTAIC)**

4610	Photochemistry and Fluorescence
4620	Photoelectrochemistry
4980	Thermochemical Processes
4990	Thermoelectric and Thermionic Processes
5000	Thermophotovoltaic

This category includes papers on all processes for direct conversion from solar to electrical or chemical energy other than photovoltaic and photosynthesis.

**Photochemistry and Fluorescence**—Chemical reactions driven by light, and producing different chemical species (but no electrical energy) and fluorescence.

**Photoelectrochemistry**—Chemical reactions in cells that are light-driven and produce electrical energy.

**Thermochemical Processes**—Thermal decomposition of chemicals in collectors. Papers in this category may also be appropriately listed under Storage, Chemical.

**Thermoelectric and Thermionic Processes**—Use of thermopiles with hot junctions heated by solar energy, or thermionic generators, to produce electrical energy.

**Thermophotovoltaic**—Processes in which an absorber is heated by solar radiation with the absorber reradiating to photovoltaic converters.

**Table 3f. FLAT PLATE COLLECTOR**

4020	Air Heater
4160	Collector Testing
4190	Collector, Design
4210	Collector, Flat Plate
4220	Collector, Flat Plate, Reflector Augmented
4230	Collector, Orientation
4240	Collector, Performance
4270	Collector, Theory, Flat Plate
4280	Collector, Thermal Losses
4430	Freeze Protection
4450	Glazing
4590	Performance Degradation

This category includes papers that relate to flat plate collectors.

**Air Heater**—Collectors designed to heat air or other gas.

**Collector Testing**—Test theory, methods, and procedures.

**Collector, Design**—All aspects of thermal or mechanical design.

**Collector, Flate Plate**—A general keyword for papers on flate plate collectors that do not fit easily under other keywords.

**Collector, Flate Plate, Reflector Augmented**—Flate plate collectors with (usually) flat reflectors to increase incident radiation.

**Collector, Orientation**—Effects of orientation on design or performance.

**Collector Performance**—Data or calculations.

**Collector, Theory, Flat Plate**—Theory of optical or thermal performance.

**Collector, Thermal Losses**—Theory and measurements of thermal losses.

**Freeze Protection**—Design, control strategies, or other means to avoid freeze damage.

**Glazing**—Glazing materials and their properties.

**Performance Degradation**—Performance loss with time due to deterioration of materials, etc.

Table 3g. PHOTOVOLTAICS

4630	Photovoltaic Cell/Array/System Performance
4640	Photovoltaic Cells
4650	Photovoltaic System Simulation, Design, Applications
4660	Photovoltaic, Economics

This category includes all aspects of photovoltaic processes, devices, arrays, and applications.

**Photovoltaic Cell/Array/System Performance**—Performance data on cells, arrays, and applications.

**Photovoltaic Cells**—Theory, experiments, practice, etc., of cells and their functioning.

**Photovoltaic System Simulation, Design, Applications**—This category includes papers on systems for applications including simulations, designs, design procedures, and the applications.

**Photovoltaic, Economics**—Papers dealing with matters relating to costs and prices of cells, arrays, and applications.

Table 3h. RADIATION MEASUREMENTS AND DATA

4030	Angles, Solar
4050	Atmospheric Transmittance
4060	Beam and Diffuse Radiation
4150	Cloud Cover and Sunshine Duration
4710	Radiation and Weather Data
4720	Radiation Estimation
4730	Radiation Instrument
4740	Radiation Statistics
4750	Radiation, Spectral Distribution
4760	Radiation, Tilted Surfaces
4810	Shading and Blocking
4830	Sky Radiation
4850	Solar Constant and Extraterrestrial Radiation
4860	Solar Radiation Simulation
5030	Utilizability

This category includes papers on solar radiation measurements data, data processing, and related climatological data.

**Angles, Solar**—Calculations of solar position, angle of incidence, etc.

**Atmospheric Transmittance**—Absorption and scattering of solar radiation in the atmosphere and effects on terrestrial radiation.

**Beam and Diffuse Radiation**—Relationships among beam (direct), diffuse, and global radiation and calculation of radiation on tilted surfaces.

**Cloud Cover and Sunshine Duration**—Effects of cloud cover or hours of sunshine on solar radiation.

**Radiation and Weather Data**—Detailed or average solar radiation data. Also, other climatic data, including temperatures, etc.

**Radiation Estimation**—Methods of estimation of solar radiation from other meteorological data.

**Radiation Instrument**—Instruments for measurement or recording of solar radiation or its components.

**Radiation Statistics**—Statistics of solar radiation and related meteorological data, such persistence, cross correlations, TMYs, etc.

**Radiation, Spectral Distribution**—Measurements or instruments for measuring wavelength dependence of solar radiation.

**Radiation, Tilted Surfaces**—Measurements or calculation of radiation on surfaces other than horizontal.

**Shading and Blocking**—Shading or blocking of solar radiation.

**Sky Radiation**—Long wave radiation from the sky, and sky temperature.

**Solar Constant and Extraterrestrial Radiation**—Intensity and spectral distribution of radiation outside of the earth's atmosphere.

**Solar Radiation Simulation**—Artificial, laboratory radiation sources approximating the spectral distribution of solar radiation.

**Utilizability**—Hourly or daily utilizability data or methods of prediction.

Table 3i. SPACE HEATING, ACTIVE

4080	Building Heating and Cooling
4090	Building Heating, Active
4100	Building Heating, Active, Performance
4110	Building Heating, Design
4430	Freeze Protection
4480	Heat Pump Systems
4490	Heating or Cooling Loads
4500	Hybrid Heating Systems
4820	Simulation and Analysis of System Performance

This category covers papers on active space heating systems, including their design, operation, practical aspects, economics, etc. Papers on hybrid systems may also be listed under these keywords.

**Building Heating and Cooling**—Combined heating and cooling systems.

**Building Heating, Active**—All aspects of active space heating systems.

**Building Heating, Active, Performance**—Performance data on active systems.

**Building Heating, Design**—Design of active building heating systems, including design methods and specific designs.

**Freeze Protection**—Designs or control strategies for avoiding freeze damage.

**Heat Pump Systems**—Combined solar and heat pump systems, in any configuration.

**Heating or Cooling Loads**—Estimation of heating or cooling loads.

**Hybrid Heating Systems**—Combined active and passive heating.

**Simulation and Analysis of System Performance**—Computer computation of system performance.

**Table 3j. SPACE HEATING, PASSIVE**

4040	Architecture
4120	Building Heating, Passive
4130	Building Heating, Passive, Performance
4340	Cooling, Passive
4460	Greenhouse
4560	Passive System Design
4570	Passive, Direct Gain
4580	Passive, Trombe Wall
4820	Simulation and Analysis of System Performance

This category includes papers on all aspects of passive and hybrid space heating, including their design, operation, economics, etc.

**Architecture**—Building design and aesthetics.

**Building Heating, Passive**—All aspects of passive and hybrid space heating.

**Building Heating, Passive, Performance**—Performance data on passive heating systems.

**Cooling, Passive**—All aspects of passive cooling.

**Greenhouse**—Solar heating of glazed spaces for plant growth.

**Passive System Design**—Passive heating system design, including design methods and specific designs.

**Passive, Direct Gain**—All aspects of direct gain heating systems.

**Passive, Trombe Wall**—All aspects of systems with collector-storage walls (Trombe Wall or Michel Wall).

**Simulation and Analysis of System Performance**—Computer computation of system performance.

**Table 3k. STORAGE**

4560	Passive System Design
4570	Passive, Direct Gain
4580	Passive, Trombe Wall and Roof Pond
4680	Pond, Solar
4890	Storage, Chemical
4900	Storage, Packed Bed
4910	Storage, Phase Change
4920	Storage, Seasonal
4930	Storage, Sensible
4940	Storage, Stratification

This category includes all aspects of energy storage, including systems in which storage is either an integral and unidentifiable part (i.e., passive) or a clearly identifiable part (i.e., active storage units).

**Passive System Design**—Designs of space heating, water heating, or other applications of passive processes.

**Passive, Direct Gain**—All aspects of direct gain systems.

**Passive, Trombe Wall and Roof Pond**—All aspects of systems with collector-storage walls (Trombe Walls or Michel Walls), including water walls and roof ponds.

**Pond, Solar**—Salt gradient or membrane stabilized solar ponds.

**Storage, Chemical**—Energy storage in the form of chemical energy, e.g., in storage battery or a dissociated chemical compound.

**Storage, Packed Bed**—Energy storage in particulates through which a heat transfer medium flows (e.g., rock bed, pebble bed, packed bed, etc.).

**Storage, Phase Change**—Energy storage by latent heat of a phase change (e.g., ice-water or sodium sulfate dehydrate).

**Storage, Seasonal**—Long-time storage (summer–winter) by any means (sensible heat in water or ground, phase change, etc.).

**Storage, Sensible**—A general keyword for papers on sensible storage that do not fit easily under other keywords.

**Storage, Stratification**—Temperature gradients in storage.

**Table 3l. SYSTEMS**

4290	Controls
4360	Design Method, Systems
4480	Heat Pump System
4590	Performance Degradation
4820	Simulation and Analysis of System Performance
4960	System Testing

This category covers papers that deal with system considerations (as opposed to components). The systems can be active or passive, and can be for any application.

**Controls**—Control theory, strategies, equipment, applications, etc.

**Design Methods, Systems**—Methods such as f-chart, SEU, and others for estimating annual performance and design of active or passive systems.

**Heat Pump Systems**—Combinations of solar collectors and heat pumps, in series, parallel, or other configurations.

**Performance Degradation**—Performance loss with time due to deterioration of materials, etc.

**Simulation and Analysis of System Performance**—Computer computation of system performance.

**System Testing**—Methods, results, etc. of system performance tests.

**Table 3m. WATER HEATING, ACTIVE**

4430	Freeze Protection
4820	Simulation and Analysis of System Performance
5040	Water Heating, Active
5050	Water Heating, Active, Performance
5060	Water Heating, Design

This category covers papers on active water heating systems, including their design, operation, economics, etc. Combined space and water heating systems may also be appropriate for listing under this category.

**Freeze Protection**—Design or control strategies or other means of avoiding freeze damage.

**Simulation and Analysis of System Performance**—Computer computation of system performance.

**Water Heating, Active**—All aspects of active water heating systems.

**Water Heating, Active, Performance**—Performance data on active water heaters.

**Water Heating, Design**—Water heating designs and design methods.

**Table 3n. WATER HEATING, PASSIVE**

4430	Freeze Protection
5010	Thermosyphon System
5060	Water Heating, Design
5070	Water Heating, Passive, Performance

This category includes papers on passive water heaters, including thermosyphon, integral collector-store, and others.

**Freeze Protection**—Design, control strategies, and other means of avoiding freeze damage.

**Thermosyphon System**—Natural circulation systems for water heating (or space heating), including those with separate collector and storage tanks and with close coupled collector and tank. All types of passive water heating systems.

**Water Heating, Design**—Design methods for water heating systems.

**Water Heating, Passive, Performance**—Performance data on passive water heaters.

**Table 3o. WIND**

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5090	Wind Systems, Applications, Economics
5100	Wind, Dynamics
5110	Wind, Hybrid Applications
5120	Wind, Resource Assessment
5130	Wind, Turbines
5140	Wind, Utility Interface

This category includes all papers on wind machines, applications, resources, designs, combinations with other resources, etc.

**Wind**—A general category used only if a paper needs to be listed under this general heading and none of the subjects listed below are appropriate.

**Wind Systems, Applications, Economics**—Systems and applications of wind machines and their economics.

**Wind, Dynamics**—Papers on turbulence, wakes, and the dynamics associated with wind as an input to turbines.

**Wind, Hybrid Applications**—Combinations of wind systems with solar, diesel, and other energy sources.

**Wind, Resource Assessment**—Data and analysis of wind speed, wind energy, etc.

**Wind, Turbines**—Information on wind turbines, their theory, design, performance, etc.

**Wind, Utility Interface**—Use of wind-generated energy by utilities.

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Ecevit, A.	44, 023	4240	4930	4960	Gabow, A.A.	46, 313	5120	
Ecevit, A.	45, 085	4720			Gagliardini, D.A.	41, 061	4720	4060
Edgar, R.M.	41, 041	4160	4720	4440	Galal, T.	41, 147	4170	4140
Edmonds, I.R.	48, 235	4180	4630	4240	Gallet, P.	41, 267	4170	4240
Edmonds, J.E.J.	47, 375	5010	5060	4430	Galli, D.	45, 215	4680	4520
Eggins, B.R.	45, 027	4620	4600		Gallo, A.	49, 191	4720	4710
El-Assy, A.Y.	42, 121	4210	4280	4240	Galvin, K.P.	46, 191	5020	4460
El-Nashar, A.M.	44, 183	4240	4370		Gardner, C.L.	41, 227	4720	4760
El-Nashar, A.M.	44, 193	4820	4370		Garg, H.P.	46, 199	4020	4210
El-Nashar, A.M.	47, 049	4710			Garg, H.P.	50, 205	4020	4190
El-Nashar, A.M.	48, 207	4370	4820		Garg, N.K.	47, 437	4120	
El-Rafey, Essam	41, 531	4630	5070		Garrison, J.D.	44, 225	4710	4060
El-Sherbiny, M.	41, 531	4630	5070		Garrison, J.D.	48, 089	4710	4060
El-shobokshy, M.S.	51, 505	4630	4640		Garrison, J.D.	50, 527	4200	4190
Eldighidy, S.M.	47, 253	4930	4920		Ge, X.S.	45, 079	4730	
Eldighidy, S.M.	51, 175	4410			Geotzberger, A.	41, 487	4190	
Elhadidy, M.A.	44, 315	4750			Geotzberger, A.	45, 093	4190	5040
Elhadidy, M.A.	46, 089	4060			Geyer, M.	41, 255	4140	
Elimam, A.A.	41, 169	4970	4390		Geyer, M.	46, 305	4910	4140
Elisei, G.	43, 077	4590	4740	4940	Ghafouri-Azar, R.	50, 441	4720	4060
Elliott, D.L.	45, 265	5080	5120	5130	Ghoneim, A.A.	42, 209	4910	4930
Elsayed, M.H.	47, 413	4810	4230	4630	Ghoneim, A.A.	42, 441	4910	4010
Elsayed, M.M.	42, 089	4230	4210	4760	Ghonneim, A.A.	47, 237	4910	4120
Elsayed, M.M.	47, 287	4810	4230	4630	Giannaros, V.D.	51, 083	4940	4930
Elsayed, M.M.	48, 107	4210	4760		Gilliaert, D.	49, 299	5010	5070
Elsayed, M.M.	49, 111	4140	4810		Gimenez, J.	49, 047	4360	4820
Ertas, A.	49, 205	4380	4400		Giraud, C.	43, 077	4590	4740
Escobedo, J.F.	42, 103	4320	4330		Givoni, B.	47, 425	4120	4570
Esteves, A.	42, 009	4720	4730	4710	Givoni, B.	50, 425	4340	4820
Exell, R.H.B.	42, 503	5080	5120		Goetzberger, A.	49, 403	4210	4280
Faas, S.E.	47, 197	4820	4360	4960	Goetzberger, A.	49, 413	4040	4130
Faiman, D.	47, 355	4200	4160		Golneshan, A.A.	47, 097	4340	4040
Faiman, D.	48, 253	4730	4060	4760	Gommel, K.	41, 081	4680	4480
Faiman, D.	49, 257	4230			Gonzalez, J.	48, 261	4860	4680
Faiman, D.	49, 489	4730			Goossens, D.	50, 075	5100	
Faiman, D.	50, 053	4730	4060	4760	Gopinathan, K.K.	41, 379	4060	
Farid, M.M.	43, 237	4910			Gopinathan, K.K.	41, 499	4720	
Farina, G.	41, 101	4270	4240	4210	Gopinathan, K.K.	45, 019	4760	
Feister, U.	49, 535	4730	4720	4750	Gopinathan, K.K.	47, 173	4710	4760
Feister, U.	49, 541	4720	4750	4730	Gopinathan, K.K.	48, 003	4060	4150
Feng, H.Q.	45, 079	4730			Gopinathan, K.K.	49, 009	4060	4720
Fernández, J.L.	44, 215	4370	4210		Gordon, J.M.	41, 215	4060	4710
Fernández, J.L.	50, 469	4370	4360		Gordon, J.M.	41, 423	4060	4740
Festa, R.	50, 009	4720	4710		Gordon, J.M.	42, 035	4060	4710
Festa, R.	51, 449	4720	4060		Gordon, J.M.	46, 211	4630	4650
					Gordon, J.M.	46, 267	4630	4820

Gordon, J.M.	47, 245	4720	4760	4060	Hollands, K.G.T.	48, 015	5060	5040
Gordon, J.M.	47, 457	5050	4960	4360	Hollands, K.G.T.	49, 381	4280	4450
Gordon, J.M.	48, 301	4970	4410	4140	Hollands, K.G.T.	49, 493	4190	4270
Gordon, J.M.	51, 317	4710	4260		Hollands, K.G.T.	49, 497	4940	5040
Gottsché, J.	49, 403	4210	4280	4190	Hollands, K.G.T.	51, 223	4450	4120
Grado, S.C.	41, 207	4070	4390	4400	Honda, T.	48, 177	4480	4890
Grado, S.C.	42, 379	4070	4390	4400	Hoogendoorn, C.J.	48, 053	4910	4020
Grado, S.C.	48, 045	4070	4400	4780	Hooper, F.C.	41, 361	4710	4060
Graham, V.A.	44, 333	4720	4710	4150	Hooper, F.C.	42, 477	4060	4710
Grald, E.W.	42, 281	4250	4170		Hooper, F.C.	43, 281	4060	4710
Grasnick, K.-H.	49, 535	4730	4720	4750	Hooper, F.C.	44, 291	4830	4060
Grasnick, K.-H.	49, 541	4720	4750	4730	Hooper, F.C.	47, 137	4060	4710
Gray, C.R.	44, 355	5120	5080		Hooper, F.C.	51, 053	4060	4720
Green, D.	48, 413	4170	4610		Hottel, H.C.	43, 107	4240	4100
Green, H.J.	42, 057	4140			Howe, E.D.	42, 339	4680	4400
Grenier, J.C.	51, 093	4720			Hu, J.	46, 029	5130	5100
Grewe, R.	49, 535	4730	4720	4750	Huacuz, J.M.	43, 145	4680	4960
Grimshaw, J.	45, 027	4620	4600		Huang, B.J.	50, 435	5010	4160
Grossi Gallegos, H.	41, 061	4720	4060	4870	Hughes, F.M.	51, 215	4290	4820
Grossman, G.	41, 081	4680	4480		Hull, J.R.	42, 365	4680	
Grossman, G.	49, 515	4310	4480	4820	Hull, J.R.	43, 057	4680	
Groumpos, P.	46, 101	4650	4630		Hulstrom, R.	42, 067	4750	4710
Groumpos, P.	46, 121	4650	4630		Husain, T.	49, 035	4710	4490
Grupp, M.	47, 107	4300	4820		Hussain, M.	48, 145	4050	4060
Gueymard, C.	42, 433	4450	5020	4060	Hussein, F.M.	41, 241	4890	
Gueymard, C.	43, 253	4060	4750	4620	Hussein, F.M.	51, 505	4630	4640
Gueymard, C.	50, 385	4060	4860	4470	Hutchinson, B.	48, 413	4170	4610
Gueymard, C.	51, 121	4060	4860	4710				
Gueymard, C.	51, 139	4060	4150	4740	Ianetz, A.	48, 097	4710	4060
Guinn, G.R.	45, 101	4370	4420		Ianetz, A.	51, 495	4060	4710
Guion, J.	46, 097	4910			Ibbetson, P.	48, 253	4730	4060
Guisan, O.	41, 371	4060	4760		Ibele, W.	51, 481	4490	4820
Guisan, O.	44, 207	4470	4760	4860	Ideriah, F.J.K.	43, 325	4710	
Gunnewiek, L.H.	51, 039	4930			Ilken, Z.	47, 069	4910	
Gupta, A.K.	51, 409	4610	4890		Imberger, J.	46, 071	4680	4820
Gupta, D.	51, 031	4210	4240	4020	Inaba, H.	46, 353	4680	4920
Gupta, S.	42, 311	4400	5040	4300	Ineichen, P.	41, 371	4060	4760
Habali, S.M.	45, 167	5130	5090	4400	Ineichen, P.	44, 099	4060	4710
HabeebuAllah, M.B.	49, 111	4140	4810		Ineichen, P.	44, 207	4470	4760
Haim, I.	49, 515	4310	4480	4820	Ineichen, P.	44, 271	4760	4750
Halawani, T.O.	49, 035	4710	4490		Ineichen, P.	45, 111	4060	4710
Hall, I.J.	41, 041	4160	4720	4440	Ineichen, P.	51, 007	4760	4750
Halmann, M.	41, 417	4610	4890		Iqbal, M.	41, 273	4060	4720
Halouani, N.	50, 247	4720	4740		Iqbal, M.	46, 083	4280	4450
Hammarsten, S.	41, 005	4570	4120		Irvine, J.T.S.	45, 027	4620	4600
Han, K.	46, 129	4080	4290		Ismail, M.Z.	46, 063	4320	4380
Hanrahan, R.J.	51, 409	4610	4890		Iynkaran, K.	49, 381	4280	4450
Haralambopoulos, D.	50, 167	5010	5050		Iynkaran, K.	51, 223	4450	4120
Harrison, A.W.	41, 387	4150			Jaffe, L.D.	42, 173	4970	4170
Harrison, A.W.	42, 327	4060	4760		Jagtap, S.S.	49, 139	4720	4710
Harrison, A.W.	46, 013	4150			Jain, P.C.	41, 397	4720	4060
Harrison, L.	41, 577	4730	4710		Jain, P.C.	45, 301	4720	4060
Harrison, L.	47, 299	4730			Jain, S.	41, 397	4720	4060
Hasan, M.	49, 107	4370	4140	5070	Jaluria, Y.	43, 129	4930	4940
Hassab, M.A.	43, 169	4680	4590		Jamal, M.A.	49, 029	4730	4680
Hassen, A.H.	45, 345	4270	4150		James, W.L.	51, 065	5110	
Hasson, A.M.	44, 001	4840	4470		Jana, A.K.	48, 215	4640	4620
Haverhals, J.	41, 341	4310	4200	4960	Jana, A.K.	51, 313	4640	4620
Hawladar, M.N.A.	50, 059	4310			Jarosch, H.S.	43, 067	4170	4440
Haynes, R.D.	44, 161	5060	4870	4360	Javelas, R.	47, 307	4820	4920
Heimo, A.	51, 159	4730	4860		Jennings, C.	42, 067	4750	4710
Hennies, M.	42, 273	4060	4630	4750	Jeter, S.M.	44, 149	4060	
Henning, H.-M.	47, 347	4050	4060		Jiménez, J.I.	42, 417	4060	4150
Hershgal, D.	50, 507	4330			Jointsi, C.K.	45, 177	4910	4890
Hershgal, D.	51, 183	4330			Joukoff, A.	45, 131	4750	4060
Hobson, P.A.	43, 085	5010	5060		Jungen, M.	47, 279	4610	4980
Hoegger, B.	51, 159	4730	4860		Kabelac, S.	46, 231	4400	4970
Hoffmann, T.	50, 407	4810			Kabelac, S.	48, 239	4060	4050
Hollands, K.G.T.	42, 335	4710	4820	4360	Kamal, W.A.	43, 169	4680	4590
Hollands, K.G.T.	43, 097	5040	4790	4930	Kamat, P.V.	44, 083	4620	4610
Hollands, K.G.T.	43, 379	4450	4280		Kambezidis, H.D.	44, 143	4030	4050
Hollands, K.G.T.	44, 333	4720	4710	4150	Kambezidis, H.D.	50, 415	4030	

Kamel, M.A.	50, 463	4710	4720		Ledanois, J.M.	41, 115	4710	4720	
Kamiuto, K.	41, 141	4680			Lee, M.-C.	44, 321	4890		
Kamiuto, K.	45, 189	4680	4800		Lehner, M.	47, 279	4610	4980	
Kanayama, K.	46, 353	4680	4920	5020	Leide, B.	47, 001	4170	4250	4260
Kandpal, T.C.	46, 139	4300	4170	4160	Leiner, W.	41, 127	4210	4270	
Kaneda, Y.	50, 447	4170	4610	4870	Leiner, W.	41, 309	4210	4270	
Kanzawa, A.	48, 177	4480	4890		Lenz, T.G.	44, 123	4320		
Karlsson, B.	50, 105	4450			Leone, C.	46, 249	4060	4720	
Karlsson, B.	51, 327	4360	4240	4030	Leone, C.	47, 083	4760	4710	
Katsoulis, B.	49, 463	5080	5120	5140	Leontaridis, N.	51, 247	4310	4910	4820
Katzman, M.T.	42, 015	5080	5090	5120	Lesino, G.	45, 215	4680	4520	
Kauranen, P.	46, 275	4910			Lesino, G.	46, 377	4680	4520	
Kaygusuz, K.	47, 383	4480	4910		Lestrade, J.P.	44, 115	4060	4150	4720
Kaygusuz, K.	51, 147	4480	4910		Leveau, J.	47, 189	4750	4050	
Kaygusuz, K.	51, 357	4480	4100		Levitian, R.	42, 267	4890	4980	4440
Keefer, C.E.	51, 409	4610	4890		Levitian, R.	48, 021	4970	4140	4980
Keita, M.	47, 269	4280	4180		Levitian, R.	48, 395	4890	4980	4440
Keizman, Y.	47, 339	4360	4910	5060	Levitian, R.	50, 179	4890	4980	4440
Kerdijk, Kees	41, 341	4310	4200	4960	Levy, M.	42, 267	4890	4980	4440
Keren, Y.	51, 255	4680			Levy, M.	45, 139	4890	4140	
Khalifa, A.M.A.	48, 279	4770			Levy, M.	48, 021	4970	4140	4980
Khalifa, A.M.A.	51, 431	4770	4340		Levy, M.	48, 395	4890	4980	4440
Khan, A.Y.	51, 401	4320	4330		Levy, M.	50, 179	4890	4980	4440
Khogali, A.	48, 079	4750	4710	4060	Levy, M.	51, 367	4980	4140	
Khouzani, K.	46, 101	4650	4630		Levy, M.	51, 419	4890		
Khousam, L.	46, 101	4650	4630		Lewis, G.C.	43, 297	4450	4710	4720
Khraishi, N.	41, 305	4890	4980		Li, J.A.	45, 079	4730		
Kierkus, W.T.	42, 143	4060	4800	4860	Li, J.-H.	47, 443	4910	4890	
Kinoshita, C.M.	49, 153	4070	4700		Lightstone, M.F.	43, 097	5040	4790	4930
Kinoshita, C.M.	51, 019	4070	4980	4700	Lightstone, M.F.	49, 497	4940	5040	4290
Kiris, I.	49, 205	4380	4400		Limaye, R.G.	42, 045	4190	4240	
Kishore, V.V.N.	45, 193	4680			Lindley, M.R.	51, 467	4020	4240	
Kittler, R.	51, 349	4830	4120	4060	Ling, C.P.	44, 145	4730		
Klanjsek Gunde, M.	50, 477	4770	4340	4800	Lingamurthy, S.	42, 359	4610		
Klein, S.A.	42, 441	4910	4010		Littler, J.	50, 129	4450	4570	
Klein, S.A.	42, 449	4320			Löf, G.O.G.	44, 123	4320		
Klein, S.A.	46, 109	4270	4740	4860	Longhettro, A.	43, 077	4590	4740	4940
Klein, S.A.	47, 237	4910	4120		Lopardo, R.	41, 061	4720	4060	4870
Klein, S.A.	47, 405	5060	4360		Lopez, C.W.	47, 039	4140		
Klein, S. A.	50, 155	5040	4940	4820	Louche, A.	41, 273	4060	4720	
Kleinbach, E.M.	50, 155	5040	4940	4820	Louche, A.	46, 261	4060		
Kleis, S.J.	45, 201	4680			Louche, A.	46, 255	4860	4150	
Kleis, S.J.	46, 371	4680			Loveday, D.L.	41, 593	4240	4160	4020
Knight, K.M.	46, 109	4270	4740	4860	Loveday, D.L.	49, 279	4480	4820	
Koč, T.	51, 415	4650	4920	4590	Loveday, D.L.	49, 289	4480	4820	
Koga, K.	41, 141	4680			Lowrey, P.	46, 361	4680	4920	4930
Kohler, H.-H.	46, 167	4910			Lowrey, P.	48, 069	4920	4680	
Kolb, G.J.	47, 039	4140			Lozano, M.C.	45, 241	4680	4840	
Korner, W.	50, 407	4810			Luhanga, P.V.C.	44, 077	4150	4740	
Krainer, A.	50, 477	4770	4340	4800	Lund, P.D.	42, 235	4920	4090	4360
Kraus, R.	51, 481	4490	4820	4450	Lund, P.D.	42, 487	4920	4730	4820
Kreider, J.F.	47, 245	4720	4760	4060	Lund, P.D.	46, 275	4910		
Kruss, P.D.	44, 315	4750			Lund, P.D.	48, 267	4920	4010	
Kudish, A.I.	48, 097	4710	4060		Lund, P.D.	48, 291	4920	4010	
Kudish, A.I.	51, 495	4060	4710	4730	Luther, J.	47, 347	4050	4060	
Kuehn, T.H.	42, 281	4250	4170		Luther, J.	50, 297	5080	5090	5140
Kumar, P.	45, 035	4650	4660	4630	Lynch, W.A.	45, 065	4650		
Kumar, S.	45, 177	4910	4890		Lynch, W.A.	46, 279	4650		
Kumar, S.	46, 139	4300	4170	4160	Lynch, W.A.	48, 349	4650		
Kumar, S.	51, 229	4650	4390		Lyons, T.J.	42, 483	5080	5120	
Kummer, J.P.	49, 429	4820	4120	4130	Lyons, T.J.	45, 149	5080	5120	
Kurata, K.	46, 053	4450	4460		Lyons, T.J.	46, 059	5080	5120	
Kuye, A.	49, 139	4720	4710	4740	Mazar, M.	48, 339	4170	4880	4590
Lacci, R.	47, 329	4570	4960	4820	Macias, M.	49, 083	4890		
Lacroix, M.	50, 357	4910			Macias-Machin, A.	49, 083	4890		
Lahiri, P.K.	48, 007	4060	4740	4720	Maheshwari, G.P.	41, 163	4170	4240	4970
Lala, D.	42, 405	4610	4730	4590	Major, G.	48, 249	4730	4060	
Landis, G.A.	50, 035	4720	4860	4870	Makrogiani, T.I.	46, 145	4060	4720	
Lawless, D.	49, 221	4510	4170	4440	Mannis, P.	41, 521	4680	5070	
Le Squin, J.	45, 333	5080	5100		Mantas, G.P.	50, 001	4590	4730	4060
LeBaron, B. A.	41, 577	4730	4710		Manwell, J.F.	41, 561	5110	5080	5090
LeBaron, B.A.	44, 249	4730	4710		Manwell, J.F.	46, 041	5080	5130	5090
LeBaron, B. A.	47, 299	4730			Manwell, J.F.	50, 399	5110	4890	4650

Marion, W.	42, 067	4750	4710	Mulpur, A.K.	44, 051	4650	4690
Martias, C.	43, 363	4060	4720	Mulyono, P.	48, 177	4480	4890
Martinez, A.	42, 395	4680	4840	Munoz, F.	48, 339	4170	4880
Martinez-Lozano, J.A.	47, 223	4060	4720	Munro, P.A.	51, 271	4020	4380
Masetti, E.	41, 443	4160	4730	Murdoch, N.	47, 447	4120	4820
Masuda, T.	42, 027	4910		Murphy, W.E.	51, 467	4020	4240
Mathur, V.K.	47, 165	4610		Myers, D.R.	43, 347	4750	4730
Matsumoto, T.	45, 315	4680	4580	Nadeau, C.A.	41, 227	4720	4760
Matthews, L.K.	48, 363	4140	4440	Nagumo, Y.	45, 189	4680	4800
Matthews, R.W.	49, 507	4370		Nakahara, N.	47, 157	4900	
Maxwell, C.R.	41, 041	4160	4720	Nakaoka, T.	41, 431	4360	4550
McCormick, P.G.	42, 303	4150	4060	Naman, S.A.	41, 241	4890	
McCormick, P.G.	43, 339	4360		Nanda, S.K.	42, 001	4280	4170
McCormick, P.G.	44, 145	4730		Nann, S.	45, 385	4230	4170
McCormick, P.G.	47, 311	4740	4060	Nardin, P.	41, 147	4170	4140
McCormick, P.G.	48, 169	4360	4630	Navaneeth Rao, T.	42, 359	4610	
McDaniels, D.K.	43, 183	4060	4760	Nayak, J.K.	42, 045	4190	4240
McEvoy, S.R.	49, 507	4370		Nayar, C.V.	51, 065	5110	
McGowan, J.G.	41, 561	5110	5080	Nepper, D.A.	41, 091	5010	5060
McGowan, J.G.	46, 041	5080	5130	Nelson, J.E.B.	49, 273	4930	4940
McGowan, J.G.	50, 399	5110	4890	Newell, T.A.	45, 231	4680	
McKay, D.C.	41, 015	4720		Newell, T.A.	46, 389	4680	4420
McKay, D.C.	43, 153	4720	4060	Newell, T.A.	49, 001	4680	
Meaburn, A.	51, 215	4290	4820	Newland, F.J.	43, 227	4060	4150
Meirovitch, E.	45, 139	4890	4140	Ng, K.C.	50, 491	4190	4240
Meirovitch, E.	46, 219	4890	4140	Nguyen, C.T.	50, 247	4720	4740
Meirovitch, E.	48, 021	4970	4140	Nguyen, S.	51, 039	4930	
Meirovitch, E.	48, 395	4890	4980	Nicklas, M.	50, 287	4790	4400
Meletis, H.	46, 145	4060	4720	Nielsen, E.	42, 365	4680	
Melitsiotis, D.	50, 197	4080	4710	Nisbet, S.K.	49, 127	4120	4560
Menguy, G.	47, 189	4750	4050	Nocera, U.	50, 113	4440	
Mermier, M.	41, 273	4060	4720	Noia, M.	51, 449	4720	4060
Meroni, I.	47, 329	4570	4960	Noia, M.	51, 457	4720	4060
Metaxas, D.A.	49, 463	5080	5120	Nordgaard, A.	49, 387	4270	4450
Meunior, F.	42, 103	4320	4330	Nordmann, Th.	51, 101	4630	4650
Meyers, D.	42, 067	4750	4710	Norton, B.	42, 457	5020	4060
Miaoulis, I.N.	44, 173	4890	4980	Norton, B.	43, 085	5010	5060
Michalsky, J.J.	41, 577	4730	4710	Norton, B.	43, 267	4260	4180
Michalsky, J.J.	42, 387	4120	4060	Norton, B.	47, 375	5010	5060
Michalsky, J.J.	44, 249	4730	4710	Norton, B.	50, 321	4170	4180
Michalsky, J.J.	44, 271	4760	4750	Norton, B.	50, 339	4170	4180
Michalsky, J.J.	47, 299	4730		Notton, G.	46, 255	4860	4150
Michalsky, J.J.	48, 133	4150	4730	Notton, G.	46, 261	4060	
Michalsky, J.J.	50, 235	4760	4750	Novak, K.S.	50, 059	4310	
Michalsky, J.J.	51, 007	4760	4750	Nunez, M.	44, 343	4720	4050
Michalsky, J.J.	51, 423	4760	4750	O'Ferrall Lund, K.	42, 133	4210	4800
Mignot, J.	41, 147	4170	4140	O'Gallagher, J.	41, 319	4170	4970
Mills, D.R.	48, 335	4800		O'Gallagher, J.	44, 257	4180	4240
Mills, D.R.	49, 257	4230		O'Mara, B.T.	43, 129	4930	4940
Minasian, A.N.	49, 107	4370	4140	Ochi, T.	45, 315	4680	4580
Minnerly, B.V.	47, 405	5060	4360	Offer, Z.Y.	50, 075	5100	
Mitchell, J.W.	42, 113	4130	4930	Ohlhausen, R.	48, 413	4170	4610
Monger, A.G.	48, 335	4800		Oliva, A.	47, 359	4270	4280
Montagne, P.	47, 107	4300	4820	Oliveira, A.C.	48, 227	4570	4130
Morales, I.	43, 373	4600		Olivieri, J.	49, 191	4720	4710
Morales, I.	49, 041	4600		Olseth, J.A.	41, 019	4050	4720
Morel, M.	45, 333	5080	5100	Olseth, J.A.	42, 221	4060	4750
Moriarty, W.W.	47, 075	4720	4060	Olseth, J.A.	49, 477	4720	4740
Moriarty, W.W.	47, 209	4710	4720	Olseth, J.A.	51, 197	4710	4720
Moriarty, W.W.	47, 219	4150	4710	Olwi, I.	48, 279	4770	
Morrison, G.L.	47, 313	4200	5010	Olwi, I.A.	51, 431	4770	4340
Morrison, G.L.	49, 065	4710	4060	Omar, M.H.	41, 247	4710	4770
Morrison, G.L.	49, 299	5010	5070	Orel, B.	50, 477	4770	4340
Morrison, I.D.	42, 335	4710	4820	Oron, M.	51, 045	4170	4180
Moschatos, A.E.	51, 391	4930	4900	Padet, J.	44, 109	4210	4270
Mostafa, S.S.	50, 463	4710	4720	Pailthorpe, B.A.	45, 291	4200	
Moussu, G.	42, 201	4730	4720	Pak, E.-T.	51, 513	4930	4940
Moustafa, S.	41, 169	4970	4390	Palacio, A.	50, 469	4370	4360
Mthembu, N.S.	49, 127	4120	4560	Pallabazzer, R.	46, 313	5120	
Muaddi, J.A.	49, 029	4730	4680	Pamplin, K.	48, 413	4170	4610
Mulholland, G.P.	41, 041	4160	4720	Pandey, G.N.	51, 027	4710	
Mulholland, G.P.	48, 363	4140	4440				
Mullick, S.C.	42, 001	4280	4170				
Mullick, S.C.	46, 139	4300	4170				

Panteliou, S.	44, 305	4590		Prieto, A.	41, 115	4710	4720
Papanikolaou, N.S.	44, 143	4030	4050	Priven, M.	51, 255	4680	
Papegeorgiou, G.	46, 121	4650	4630	Probert, S.D.	42, 457	5020	4060 4450
Papini, F.	41, 267	4170	4240	Probert, S.D.	43, 267	4260	4180
Papini, F.	43, 045	4170	4280	Pryor, T.L.	51, 065	5110	
Parent, M.G.	45, 043	5060	5070				
Paripatadar, S.A.	41, 475	4980	4970 4140	Qamhiyeh, A.A.	44, 183	4240	4370
Paripatadar, S.A.	48, 021	4970	4140 4980	Rabl, A.	47, 001	4170	4250 4260
Parise, J.A.R.	48, 353	4410	4820	Rabl, A.	47, 017	5050	4960 4360
Parker, B.F.	51, 467	4020	4240	Rabl, A.	47, 457	5050	4960 4360
Parker, R.Z.	51, 409	4610	4890	Radhwan, A.M.	51, 277	4370	
Parrini, F.	49, 087	4560	4920	Radosevich, L.G.	47, 197	4820	4360 4960
Parrini, F.	49, 095	4560	4920	Ragab, F.M.	47, 115	4150	4710 4720
Parrott, J.E.	51, 195	4830		Raja, I.A.	43, 355	4710	4720 4740
Pasquetti, R.	41, 267	4170	4240	Raja, I.A.	44, 063	4150	4720
Pasquetti, R.	43, 045	4170	4280	Raja, I.A.	44, 073	4740	
Passos, E.F.	42, 103	4320	4330	Raman, P.	45, 193	4680	
Pathak, V.M.	50, 123	4620	4640 4840	Ramos, C.	43, 145	4680	4960
Patil, B.G.	43, 305	4380	4820	Ranade, S.M.	44, 321	4890	
Patnaik, S.	44, 123	4320		Rao, D.P.	50, 135	4680	4920
Pedersen, P.V.	50, 259	5040	5050	Rapti, A.S.	50, 001	4590	4730 4060
Pedersen, P.V.	50, 267	4010	4390 5060	Rosas, M.	41, 159	4710	
Peippo, K.	46, 275	4910		Ratto, C.F.	41, 397	4720	4060
Peire, J.	47, 197	4820	4360 4960	Ratto, C.F.	50, 009	4720	4710
Peltola, S.S.	48, 267	4920	4010	Ratto, C.F.	51, 449	4720	4060
Peltola, S.S.	48, 291	4920	4010	Ratto, C.F.	51, 457	4720	4060
Pen, A.	43, 057	4680		Razafindraibe, A.	41, 371	4060	4760
Penman, J.M.	47, 447	4120	4820	Reale, F.	46, 241	4140	
Peral, J.	41, 055	4610		Reale, F.	50, 113	4440	
Pereira, A.C.	44, 137	4730	4750	Reddy, T.A.	41, 215	4060	4710 4740
Perers, B.	50, 517	4160	4240 4060	Reddy, T.A.	41, 423	4060	4710 4740
Perers, B.	51, 327	4360	4240 4030	Reddy, T.A.	42, 035	4060	4710 4740
Perez, L.R.	48, 261	4860	4680 4240	Reddy, T.A.	48, 151	4210	5010
Perez, R.	41, 577	4730	4710	Reeves, P.	47, 245	4720	4760 4060
Perez, R.	42, 387	4120	4060	Reeves, P.	48, 413	4170	4610
Perez, R.	44, 099	4060	4710	Rehman, S.	49, 035	4710	4490
Perez, R.	44, 207	4470	4760 4860	Reindl, D.T.	45, 001	4060	4720 4710
Perez, R.	44, 249	4730	4710	Reindl, D.T.	45, 009	4760	4060 4720
Perez, R.	44, 271	4760	4750	Reisfeld, R.	41, 133	4680	
Perez, R.	45, 111	4060	4710	Remmer, D.	51, 065	5110	
Perez, R.	47, 181	4060	4050	Reshef, M.	48, 403	4270	4360 4190
Perez, R.	47, 299	4730		Rheault, S.	44, 157	4570	4460
Perez, R.	50, 235	4760	4750 4120	Richardson, J.T.	41, 475	4980	4970 4140
Perez, R.	51, 007	4760	4750 4120	Richardson, J.T.	48, 021	4970	4140 4980
Perez, R.	51, 423	4760	4750 4120	Ries, H.	51, 317	4710	4260
Perez Segarra, C.D.	47, 359	4270	4280 4820	Rightley, M.J.	48, 363	4140	4440 4780
Petersen, H.	45, 167	5130	5090 4400	Riordan, C.	42, 067	4750	4710
Petit, M.	46, 149	4460		Robertson, H.S.	47, 269	4280	4180
Philippona, R.	51, 159	4730	4860	Robinson, A.	49, 309	4730	
Phillips, S.J.	51, 065	5110		Robinson, A.	49, 315	4730	
Pierson, P.	44, 109	4210	4270	Robinson, P.	50, 129	4450	4570
Pinazo, J.M.	49, 175	4260		Robinson, S.J.	47, 027	4450	
Piro, J.	49, 159	4710	4060	Rodriguez, J.	46, 175	4440	4980
Platzer, W.J.	48, 381	4280	4190	Rogdakis, E.D.	50, 417	4680	
Platzer, W.J.	49, 351	4280	4450	Rommel, M.	49, 371	4210	4520 5010
Platzer, W.J.	49, 359	5020	4450	Rommel, M.	49, 403	4210	4280 4190
Platzer, W.J.	49, 381	4280	4450 5020	Roomina, M.R.	50, 441	4720	4060 4150
Poggi, P.	46, 255	4860	4150	Roos, A.	50, 105	4450	
Poggi, P.	46, 261	4060		Rosa, F.	46, 175	4440	4980
Poje, D.	41, 543	5120		Rosa, F.	46, 305	4910	4140
Polato, P.	41, 443	4160	4730	Rosen, M.A.	41, 361	4710	4060
Pollastro, C.	47, 329	4570	4960 4820 4120	Rosen, M.A.	42, 477	4060	4710
Porat, Z.	41, 417	4610	4890	Rosen, M.A.	43, 281	4060	4710 4740
Porisini, F.C.	41, 193	4910		Rosen, M.A.	48, 123	4060	
Post, H.N.	41, 465	4630	4650 4660	Rosen, M.A.	51, 039	4930	
Prapas, D.	43, 267	4260	4180	Rosin, H.	42, 267	4890	4980 4440
Prapas, D.	46, 237	5010		Rosin, H.	48, 021	4970	4140 4980
Prapas, D.	51, 083	4940	4930	Rosin, H.	48, 395	4890	4980 4440
Prasad, B.N.	41, 555	4020	4240	Rosin, H.	50, 179	4890	4980 4440
Prasad, B.N.	47, 091	4210	4240 4020	Roy, S.	41, 513	4660	4650
Prasad, D.K.	50, 499	4120	4130	Roy, S.	48, 215	4640	4620 4980
Prasad, R.	50, 135	4680	4920	Roy, S.	51, 313	4640	4620
Prengle, H.W.	44, 321	4890		Rubin, H.	43, 025	4680	
Presa, J.L.	47, 197	4820	4360 4960				

Rubin, H.	43, 035	4680		Shakir, A.	49, 107	4370	4140	5070	
Rubin, H.	46, 021	4680		Shalaby, S.A.	50, 463	4710	4720		
Rubin, H.	49, 245	4680		Shaltout, M.A.M.	41, 247	4710	4770		
Rubin, H.	51, 255	4680		Shaltout, M.A.M.	43, 331	4850			
Rubin, R.	48, 395	4890	4980	4440	Shaltout, M.A.M.	45, 345	4270	4150	
Rubin, R.	50, 179	4890	4980	4440	Sharma, S.K.	45, 177	4910	4890	
Ruiz, V.	47, 181	4060	4050		Sharma, S.P.	47, 059	4210	4240	4020
Ruocco, G.	46, 241	4140			Shavit, A.	49, 515	4310	4480	4820
Ruocco, G.	50, 113	4440			Shen, B.	49, 309	4730		
Rymes, M.	42, 067	4750	4710		Shen, B.	49, 315	4730		
Sabbagh, J.A.	48, 279	4770			Sherman, B.S.	46, 071	4680	4820	4940
Sabbagh, J.A.	51, 431	4770	4340		Sherman, B.S.	49, 321	4680	4940	
Sabzevari, A.	47, 097	4340	4040	5080	Sherman, I.	50, 035	4720	4860	4870
Sadler, G.W.	49, 013	4740	4750		Siala, F.M.F.	44, 291	4830	4060	4740
Sagara, K.	47, 157	4900			Sick, F.	49, 429	4820	4120	4130
Saha, H.	41, 513	4660	4650		Sierra, F.	43, 145	4680	4960	
Sahsamanoglou, H.S.	43, 301	4750	4720		Simarro, R.	49, 047	4360	4820	
Sahsamanoglou, H.S.	46, 145	4060	4720		Simonnot, G.	41, 273	4060	4720	
Said, S.A.	41, 241	4890			Simonnot, G.	46, 255	4860	4150	
Saini, J.S.	41, 555	4020	4240		Simonnot, G.	46, 261	4060		
Saini, J.S.	47, 059	4210	4240	4020	Singh, O.P.	51, 027	4710		
Saini, J.S.	47, 091	4210	4240	4020	Sitharama Rao, T.L.	49, 273	4930	4940	
Saini, J.S.	51, 031	4210	4240	4020	Skartveit, A.	41, 019	4050	4720	
Salameh, Z.M.	44, 051	4650	4690		Skartveit, A.	42, 221	4060	4750	
Salameh, Z.M.	44, 057	4650			Skartveit, A.	49, 477	4720	4740	
Salameh, Z.M.	45, 065	4650			Skartveit, A.	51, 197	4710	4720	4740
Salameh, Z.M.	46, 279	4650			Skinrood, A.C.	47, 197	4820	4360	4960
Salameh, Z.M.	48, 349	4650			Sklar, S.	50, 101	4390		
Salman, O.A.	41, 305	4890	4980		Sloan, D.	48, 413	4170	4610	
Samuel, T.D.M.A.	47, 333	4720			Sloetjes, W.	41, 341	4310	4200	4960
Sanchez, L.A.	45, 201	4680			Smith, M.K.	45, 231	4680		
Sanchez, L.A.	46, 371	4680			Smith, M.K.	46, 389	4680	4420	
Sankarasubramanian	51, 109	4170	4190	4250	Sohi, M.	49, 235	4910	4820	4300
Santamouris, M.	50, 197	4080	4710		Sokolov, M.	44, 013	4680	5070	
Saravia, L.	45, 215	4680	4520		Sokolov, M.	47, 339	4360	4910	5060
Saravia, L.	46, 377	4680	4520		Sokolov, M.	48, 403	4270	4360	4190
Sarig, S.	41, 133	4680			Sokolov, M.	49, 181	4290	5030	
Sarig, S.	45, 185	4680			Sokolov, M.	50, 507	4330		
Sasson, Y.	43, 291	4890	4400	4010	Sokolov, M.	51, 183	4330		
Sata, S.	41, 141	4680			Solanki, S.C.	51, 031	4210	4240	4020
Satyamurty, V.V.	48, 007	4060	4740	4720	Soler, A.	41, 335	4060		
Satyanaryana Murthy	49, 273	4930	4940		Soler, A.	44, 179	4150	4740	4710
Saygin, O.	51, 001	4070	4210	4380	Soler, A.	44, 297	4060		
Scamoni, F.	47, 329	4570	4960	4820	Soler, A.	45, 365	4150	4270	
Schaefer, R.	48, 069	4920	4680		Soler, A.	48, 221	4150	4060	
Scheffler, T.B.	51, 339	4240	4160	4190	Soler, M.R.	49, 053	4050	4060	
Schiel, W.J.C.	41, 255	4140			Soltau, H.	49, 263	4160	4950	
Schmid, J.	41, 487	4190			Somers, R.E.	44, 161	5060	4870	4360
Schmid, J.	46, 295	4820	4120		Sorapipatana, C.	42, 503	5080	5120	
Schmid, J.	49, 413	4040	4130	4560	Sørensen, B.	42, 293	4460	4240	4670
Schmid, R.	45, 291	4200			Sotiropoulos, B.A.	46, 237	5010		
Schmidt, Ch.	41, 487	4190			Sotiropoulos, B.A.	51, 083	4940	4930	
Schmidt, Ch.	45, 093	4190	5040	5070	Souza Brito, A.A.	44, 137	4730	4750	
Schreitmuller, K.R.	47, 347	4050	4060		Spencer, L.C.	43, 191	4410	4690	4970
Schubnell, M.	50, 019	4140	4250	4440	Spencer, L.C.	43, 197	4410	4690	4970
Seals, R.	44, 099	4060	4710		Spencer, L.C.	43, 211	4410	4690	4970
Seals, R.	44, 271	4760	4750		Sragovich, D.	43, 007	4930		
Seals, R.	45, 111	4060	4710		Srinivasa Murthy, S.	50, 275	4680	4820	
Seals, R.	50, 235	4760	4750	4120	Srinivasa Murthy, S.	50, 307	4680	4820	
Seals, R.	51, 007	4760	4750	4120	Srinivasa Murthy, S.	50, 453	4330	4310	
Seals, R.	51, 423	4760	4750	4120	Srinivasan, J.	45, 221	4680		
Segal, A.	45, 139	4890	4140		Srinivasan, J.	48, 287	4210	4280	
Segal, A.	46, 219	4890	4140		Srinivasan, K.	50, 453	4330	4310	
Segal, A.	48, 395	4890	4980	4440	Srivastava, R.	50, 123	4620	4640	4840
Segal, A.	51, 367	4980	4140		Srivastava, S.K.	51, 027	4710		
Segal, A.	51, 419	4890			Stahl, W.	49, 413	4040	4130	4560
Segal, M.	41, 049	4150	4710	4400	Stedman, B.A.	49, 493	4190	4270	4250
Segura, G.	42, 395	4680	4840		Steinberger-Willms, R.	50, 297	5080	5090	5140
Selvidge, M.	44, 173	4890	4980		Steinfeld, A.	50, 019	4140	4250	4440
Semparote, D.G.	43, 057	4680			Stevens, D.I.	42, 449	4320		
Serpone, N.	49, 221	4510	4170	4440	Stewart, R.	41, 577	4730	4710	
Sethuram, B.	42, 359	4610			Stewart, R.	44, 271	4760	4750	
Shaban, N.	41, 159	4710			Stockerl, R.	46, 167	4910		
					Stone, R.J.	51, 289	4740	4730	4720

Strauss, C.H.	41, 207	4070	4390	4400	Vitale, S.	49, 095	4560	4920
Strauss, C.H.	42, 379	4070	4390	4400	Vitner, A.	41, 133	4680	
Strauss, C.H.	45, 105	4070	4390	4780	Vitner, A.	45, 185	4680	
Strauss, C.H.	48, 045	4070	4400	4780	Vitorino, C.	41, 033	4960	5050 4010
Subhakar, D.	50, 275	4680	4820		Vo-Ngoc, D.	50, 247	4720	4740
Subhakar, D.	50, 307	4680	4820					
Sudjito	49, 065	4710	4060		Wackernagel, M.	47, 107	4300	4820
Suehrcke, H.	42, 303	4150	4060	4720	Wade, J.E.	45, 285	5120	5080 5130
Suehrcke, H.	43, 339	4360			Wagner, A.	49, 371	4210	4520 5010
Suehrcke, H.	44, 145	4730			Wald, L.	42, 201	4730	4720
Suehrcke, H.	47, 311	4740	4060	4720	Walker, S.N.	45, 285	5120	5080 5130
Suehrcke, H.	48, 169	4360	4630	4740	Wamots, M.I.	41, 141	4680	
Sukawat, D.	42, 503	5080	5120		Wang, J.-Y.	47, 443	4910	4890
Sukhatme, S.P.	42, 045	4190	4240		Wang, X.A.	45, 071	4210	4280
Suleman, S.O.	43, 325	4710			Wang, Y.	49, 153	4070	4700
Suresh, D.	44, 257	4180	4240		Wang, Y.	51, 019	4070	4980 4700
Suri, R.K.	41, 163	4170	4240	4970	Wang, Y.F.	44, 243	4680	4840 4820
Swaid, H.	49, 549	4340			Ward, G.T.	43, 305	4380	4820
Tabor, H.Z.	45, 247	4680			Weaver, J.F.	41, 049	4150	4710 4400
Tadros, M. T. Y.	43, 331	4850			Wei Gong	44, 037	4610	4980
Tag, I.A.	43, 169	4680	4590		Wendler, G.	47, 121	4050	4740 4750
Taga, M.	45, 315	4680	4580	4920	Wenger, H.J.	46, 211	4630	4650 4810
Tahir, K.	42, 081	4060	5020	4720	Wentworth, W.E.	44, 037	4610	4980
Tahir, K.	44, 007	4710	4740		Wenxian, L.	41, 001	4060	4720
Talukdar, J.	47, 165	4610			Werneck-Faga, M.	51, 093	4720	
Tam, K.-S.	45, 035	4650	4660	4630	Western, B.E.	45, 121	4720	4060
Tang, J.-Z.	49, 333	4450			Whitaker, C.	42, 067	4750	4710
Tarpley, J.D.	41, 061	4720	4060	4870	Wiener, H.	43, 291	4890	4400 4010
Taylor, D.	44, 057	4650			Wijeyesundara, N.E.	46, 083	4280	4450 4210
Tebaldi, P.	49, 299	5010	5070		Wilke, W.-S.	46, 295	4820	4120
Teisseire, M.	46, 097	4910			Wilkins, E.	46, 383	4680	4960 5050
Terzian, R.	49, 221	4510	4170	4440	Wilson, H.R.	42, 273	4060	4630 4750
Thomas, D.L.	45, 101	4370	4420		Wilson, H.R.	49, 435	5020	4800 4450
Thomas, M.G.	41, 465	4630	4650	4660	Winn, C.B.	46, 129	4080	4290
Thomasson, B.O.	45, 101	4370	4420		Winston, R.	41, 319	4170	4970 4260
Thorpe, G.R.	46, 063	4320	4380		Winston, R.	44, 257	4180	4240
Ti Tien, H.	48, 199	4510	4640	4620	Winston, R.	47, 457	5050	4960 4360
Tiba, C.	48, 301	4970	4410	4140	Winter, E.R.F.	51, 481	4490	4820 4450
Tirloni, P.	47, 329	4570	4960	4820	Wirth, W.	51, 205	4650	4690
Tleimat, M.C.	42, 339	4680	4400		Wise, D.L.	41, 453	4070	4400
Toksoy, M.	47, 069	4910			Wittwer, V.	49, 403	4210	4280 4190
Tosun, A.	51, 001	4070	4210	4380	Wolf, J.	45, 333	5080	5100
Trent, T.	44, 115	4060	4150	4720	Wong, E.H.S.	47, 165	4610	
Tributsch, H.	43, 139	4700	4510	4500	Wood, B.D.	48, 195	4310	
Tripanagnostopoulos	48, 031	4190	4170	4530	Wood, B.D.	50, 059	4310	
Trombe, A.	46, 149	4460			Wright, J.	42, 387	4120	4060
Tsangrassoulis, A.E.	50, 415	4030			Wright, J.L.	43, 379	4450	4280
Tselepidaki, I.	50, 197	4080	4710		Wright, L.L.	45, 105	4070	4390 4780
Tsiamouris, S.G.	51, 083	4940	4930		Wu, L.G.	45, 071	4210	4280
Tsilingiris, P.T.	49, 019	4310	4680		Xi guang, Z.	49, 199	4440	4070
Tsilingiris, P.T.	50, 369	4730			Yacoub, K.	43, 237	4910	
Turégano, J.A.	42, 149	4140	4810		Yaghoubi, M.A.	47,	4340	4040 5080
Twidell, J.W.	43, 355	4710	4720	4740	097			
Twidell, J.W.	44, 063	4150	4720		Yahaya, S.	49, 159	4710	4060
Twidell, J.W.	44, 073	4740			Yalçin, H.	51, 415	4650	4920 4590
Uehara, H.	41, 431	4360	4550	4690	Yanadori, M.	42, 027	4910	
Upper, J.M.	45, 231	4680			Yang, R.	48, 195	4310	
Utrillas, M.P.	47, 223	4060	4720	4760	Yanniotis, S.	51, 247	4310	4910 4820
Valko, P.	51, 349	4830	4120	4060	Yeboah-Amankwah, D.	45, 371	4720	4730
Valverde, A.	46, 175	4440	4980		Yehezkel, N.	51, 045	4170	4180 4250
van der Meer, Th.H.	45, 043	5060	5070		Yeung, M.R.	48, 309	4310	4960
van Hattem, D.	41, 005	4570	4120		Yianoulis, P.	48, 031	4190	4170 4530
van Niekerk, W.M.K.	51, 339	4240	4160	4190	Yianoulis, P.	48, 421	4710	4150 4720
Varadarajan, R.	51, 229	4650	4390		Yogev, A.	51, 045	4170	4180 4250
Varma, H.K.	47, 059	4210	4240	4020	Yoo, H.	51, 513	4930	4940
Vaxelaire, P.	47, 189	4750	4050		Youcef, L.	46, 183	4100	4110
Vazquez, M.	47, 181	4060	4050		Yuen, P.K.	48, 309	4310	4960
Venegas, C.	43, 145	4680	4960		Zabara, K.	48, 421	4710	4150 4720
Vetter, G.	51, 205	4650	4690		Zaidman, B.	43, 291	4890	4400 4010
Vignola, F.	43, 183	4060	4760		Zakhidov, R.A.	42, 509	4250	
Vitale, S.	49, 087	4560	4920					

Zaki, G.M.	51, 277	4370		Zemel, A.	48, 253	4730	4060	4760	
Zaman, M.A.	42, 167	4380		Zemel, A.	49, 489	4730			
Zangrandi, F.	46, 323	4680	4790	4940	Zemel, A.	50, 053	4730	4060	4760
Zangvil, A.	50, 075	5100		Zemel, A.	50, 483	4730	4590		
Zelenka, A.	41, 371	4060	4760	Zemel, A.	51, 377	4730			
Zelenka, A.	41, 405	4060	4720	4760	Zhang, G.-E.	47, 443	4910	4890	
Zelenka, A.	44, 099	4060	4710		Zhang, Z.M.	44, 243	4680	4840	4820
Zelenka, A.	45, 111	4060	4710		Zhengfen, L.	49, 199	4440	4070	
Zemel, A.	48, 059	4760	4060		Zrikem, Z.	42, 427	4580	4360	4120